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INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

TEMPORARY NATIONAL ECONOMIC COMMITTEE

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ECONOMIC STANDARDS OF GOVERNMENT PRICE CONTROL

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MONOGRAPH No. 32

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WASHINGTON, D. C., December 23, 1940.

Senator JOSEPH C. O'MAHONEY,
*Chairman, Temporary National Economic Committee,
United States Senate, Washington, D. C.*

SIR: I have the honor to submit a report on Economic Standards of Government Price Control, edited by Dr. Donald Wallace, Associate Professor of Economics at Williams College. It is composed, first, of three independent monographs, illustrative of the standards involved in State and Federal regulation of prices in electric power, milk, and bituminous coal, each prepared by an expert or group of experts in the field, and, second, of a systematic examination by Dr. Wallace of these standards and the alternatives from an economist's point of view. Unfortunately, limitations of time made it impossible to include either a study of the railroads, the oldest and most outstanding example of governmental price regulation in the United States, or of emergency price fixing during the World War.

I regard this monograph as merely a beginning of the study of one of the most complex and difficult questions which confronts this committee: Should the scope of Government regulation of industry be extended, and if it is to be extended, by what means and to what specific social and economic ends? Although this particular report centers around Government regulation of prices, all of our investigations clearly indicate that to regulate prices effectively and with honest concern for the welfare of the public and of any particular industry necessarily involves the assumption of a large measure of responsibility for all phases of the life of that industry. It is the failure to recognize this all-important fact that has led to many of the difficulties of Government price regulation.

When this inquiry into Government regulation of pricing was initially proposed, it had been our hope not only to consider in detail the question "To what specific economic and social ends has public price regulation been directed?" as this report now does, but also to evaluate the administrative techniques employed by regulatory bodies, and if possible to arrive at some conclusions regarding the efficacy of the typical American form of commission regulation.

Before the completion of the analysis originally planned, several members of the staff, and in particular Dr. Wallace, joined the staff of the Advisory Commission to the Council of National Defense or were otherwise engaged in emergency work. The report as it now stands was completed only with great personal sacrifice on their part. Moreover it was impossible for me or for the other members of the Bureau's staff to weigh the analysis presented by these experts and to synthesize it into recommendations for this committee. In consequence, the scope of the final analysis was necessarily narrowed and many of the practical questions concerning techniques of regulation and administration are not presented in definitive form.

Nevertheless, there are a number of general observations which are clear. From an economic point of view public price regulation as practiced in the United States has revealed serious shortcomings. The reasons for this lack of success have been many, but the foremost of these has been the failure to direct regulation toward the achievement of sufficiently broad and, at the same time, sufficiently exploita-social and economic goals. In practice the objectives of regulation have been at once too uncertain and too detailed, too broad and too precise. In all cases, regulation has been undertaken for the specific purpose of dealing with immediate conditions in a single industry. The regulation of railroads and public utilities was undertaken in order to protect the users of their services from monopolistic exploitation, while regulation of milk and coal was adopted in order to alleviate distress among those producing these commodities. In none of these cases has there been an adequate realization of the relation of these particular industries to the general economy. Thus, it is evident that railroad and utility rates involve far broader questions than merely the protection of a particular consumer or class of consumers from being overcharged. The key position of these industries in the economy is such that any change in rates has far-reaching repercussions upon industrial and agricultural production, upon the distribution of goods, upon the flow of investment, and upon the use of purchasing power. Similarly, the prices of milk and coal affect not only producers in these industries but also many other industries; an increase in coal prices may increase costs of production in industries using coal as well as the ability of the consumers of coal to buy other products.

Not only has regulation generally failed to take due account of the relation of regulated industries to the economy as a whole, but it has also given undue emphasis to immediate rather than long-range problems. Rates have almost invariably been fixed with an eye to conditions prevailing at the moment without adequate regard for the long term welfare of the industry it was designed to benefit. An outstanding illustration of this narrow approach is the increase in railroad freight rates during the early thirties. This attempt to bolster railroad revenues during a period of severe depression has apparently had the long-range effect of permanently diverting traffic to other means of transportation.

In practice, rates have often been fixed even without a clear view to the immediate avowed objectives of regulation. Instead rate making has resolved itself into the observance of narrow rules of procedure based upon an unfortunate effort to tie rates closely to a standard of accounting costs. This standard of production costs, whether specific or merely implied, is the one concrete guide which seems to pervade the thinking of most regulatory bodies. Thus in the case of public utilities, the usual practice has been to try to keep rates at the lowest levels which will return full cost of production including an adequate profit for invested capital. In bituminous coal the effort has been to raise prices to a level which will at least return production costs as defined in the act. The complexities of milk marketing and production make it more difficult to relate prices to cost with any semblance of accuracy, but the effort to approach this relation is evident in both legal and administrative action.

The reasons for this emphasis upon cost are fairly clear. It affords the only commonly available measure of the fairness of any rate schedule to producers and is an essential consideration in the light of the Supreme Court's interpretation of the fourteenth amendment to the Constitution, emphasizing the Court's conviction that any rate schedule which does not cover costs of production is confiscatory.

In the eyes of the administrator and the economist, however, there are shortcomings in the regulation of prices on the basis of production costs. One of these is the general difficulty—in fact the near impossibility—of measuring costs accurately, and particularly of allocating total production costs to individual products and services—e. g., various grades of coal, or kinds of electric service. The second is the fact that the determination of costs, particularly when attended by valuation proceedings, is such a long and laborious process that rates or prices so determined are almost inevitably out of date by the time they are arrived at.

A third and even more serious difficulty with the cost standard is the general emphasis upon past costs and past operations, and the general failure to make any allowance for the possible effect of rate or price changes upon future consumption. Thus, if electric rates were lowered would consumption increase enough to yield not merely the same, but perhaps a greater profit to producers, at the same time serving a wider public? Granted the difficulty, if not the impossibility of predicting in advance precisely how sales will be affected by a given change in price, is it not a proper matter of public concern that public-determined prices be so set that they give a maximum possible use of the service or commodity to consumers? Yet the cost standard as generally interpreted and applied rules out any such a constructive approach.

This failure of the cost standard to look toward the future rather than the past becomes particularly acute during periods of rapid change in the general rate of business activity. By its very nature it operates in opposition to the natural downward trend of prices in depression and the upward trend in recovery. Thus, during a depression, producers' income is necessarily reduced and may fail to cover all costs including overhead; at such a time an increase in price is indicated if the cost yardstick is to be followed strictly. But higher prices often mean still lower consumption and further reductions in sales and in profit, not only of the commodity or service directly affected but also of other commodities.

Nor is the cost standard well adapted toward achieving the most desirable relation between the prices charged for different products of the same industry or to different users of the same products. Even if it were possible to allocate costs accurately for different grades of coal, different users of milk, and different consumers of electric power, it by no means follows that prices for these different grades or to these different users should be adjusted accordingly. In practice, this problem has been handled by regulatory commissions largely on a rule-of-thumb basis, but it does not seem to have been handled adequately. The difficulty seems to lie not with the lack of any objective measures, where such measures are largely impracticable, but rather with the lack of a broad approach to the issues involved.

To illustrate: The relation between electric rates charged domestic users and those charged commercial and industrial users has many

ramifications. It should not be assumed too readily that consumers would benefit by having domestic rates reduced at the expense of commercial and industrial rates if such reductions involve an increase in the costs and prices of the commodities produced and sold by these commercial and industrial users of power. A great deal of study on the part of regulatory commissions would be necessary to explore questions of this kind, but it is entirely possible that such a study would be repaid by the development of an economically more satisfactory basis of rate making.

Finally, regardless of the standard used, any form of regulation by an administrative body necessarily involves a certain amount of delay in adjustment to changing conditions. Price changes cannot be ordered on the spur of the moment; they must usually be based upon the assembly and consideration of all pertinent evidence. In addition, there may be other delays due to the substantive or procedural requirements of the law, to dilatory tactics on the part of the groups regulated, or simply to the failure of the regulating agency to move promptly. There can be no question that all these delays—whether or not inherent in the process—introduce certain elements of rigidity into the price structure of the economy, rigidity which, in private enterprise, has been frequently deplored by governmental agencies. The seriousness of these delays depends upon the circumstances, but the issue is one with which there should be very real concern. It may, of course, be said that regulation has been largely applied in the past to industries such as railroads and electric utilities, which are monopolistic by nature, and that monopoly prices have always been relatively unresponsive to changing economic conditions. This argument overlooks the fact that regulation implies an effort to control such monopoly power for the public well-being, and that it may well be a part of this effort to increase the rapidity and flexibility of price or rate changes to the forces of the market.

The report also suggests that legislatures and regulatory commissions may have too readily accepted apparent constitutional limitations upon their powers and have failed to explore the possibilities afforded by new approaches to their desired objectives. Thus the doctrine of fair return on fair value constitutes a limitation upon the manner in which past investment may be treated. On the other hand, if a clear policy were laid down by the legislative body regarding the treatment of new investment in an industry, and potential investors were made aware of such a change in policy, an entirely new situation might be created. Under a program of this kind existing limits would apply only to past investment for the life of that investment, and as new capital is gradually introduced, virtually the entire industry would eventually be subject to the new rules of the game. It might then be possible to fix rates, not in accordance with an arbitrary cost formula, but with due consideration for the economic well-being of the industry, its customers and the economy as a whole. In particular, it would become possible to take account of the effect of rate reductions upon consumption in formulating price policy.

In summary, it seems evident that public regulation of prices in the United States has suffered from many handicaps. Some of these handicaps may be traced to an inadequate grasp of the issues by regulatory commissions, by courts, and by legislatures. In many cases legislatures have abdicated their function by failing to lay down goals and programs with sufficient clarity and precision. As regards com-

missions there has been a noticeable improvement in procedural efficiency on the part of at least some. There has been much less progress as regards the substantive aspects of their programs. What improvement there has been, moreover, has concentrated largely upon issues involved in relating rates to immediate conditions upon the basis of a fairly rigid cost formula. The broader questions, such as the development of a consistent policy of seeking to stimulate consumption through adjustments in prices, or upon the still broader basis of the effect of a particular regulation upon the economy as a whole, have been conspicuously neglected.

All this does not augur well for a present extension of direct price regulation into new fields. Until we have shown a greater ability to master the techniques of regulation than heretofore, it is clear that we should be cautious about broadening its application in normal times. However, in a serious national emergency, conditions may make direct price control imperative in some industries.

* * * * *

This study was under the immediate direction of Dr. Donald Wallace, Associate Professor of Economics at Williams College, formerly of Harvard University, who served as editor of the series of independent monographs, and prepared the summary and the examination of economic standards of price regulation which forms Part IV. In the early stages of this work he was assisted by John M. Blair.

The study of Government regulation of electric utilities which forms Part I of this report was made by Ben W. Lewis, Ph.D., LL.D., Professor of Economics at Oberlin College, an expert in the field of public utilities.

Part II, Public Pricing of Milk, was prepared by three experts in the field of regulation of fluid-milk markets, who jointly wrote the introduction. The chapter on Federal Price Fixing in Milk Markets was written by Dr. Warren C. Waite, Professor of Agricultural Economics at the University of Minnesota. The chapter on Price Fixing in Five States was prepared by Professors Don S. Anderson and R. K. Froker of the University of Wisconsin. Mr. Anderson is Associate Professor of Agricultural Economics at the University of Wisconsin, and is engaged primarily in research and extension work in agricultural economics. Mr. Froker is Associate Professor of Agricultural Economics at the University of Wisconsin and is engaged in research, teaching, and extension, principally in the field of marketing.

Part III, Price Fixing in the Bituminous Coal Industry, the study of cost and other standards prescribed for price regulation by the Bituminous Coal Act of 1937, was prepared by Ellery B. Gordon, a former member of the staff of the National Bituminous Coal Commission, and William Y. Webb, formerly of the office of the Consumers' Counsel of the Bituminous Coal Commission.

The Bureau of Labor Statistics is greatly indebted to the authors of this volume, and in particular to Dr. Wallace. The facts presented in the three independent monographs which form Parts I-III and the analysis in Part IV have been assembled by the authors, and the analyses, conclusions, and recommendations contained therein represent their considered personal opinions, not the opinions of the Bureau of Labor Statistics.

Respectfully submitted.

ISADOR LUBIN,
Commissioner of Labor Statistics.

SUMMARY

In the past two decades proposals have multiplied for extension of Government price control into more and more industries hitherto without public regulation of prices. At this midpoint in the passage to a new public policy toward industry it is advisable to survey and appraise the objectives, control devices, economic standards, and results of Government price control in the past and the present. This report on *The Economic Standards of Government Price Control* presents such a survey and appraisal for selected instances of public control in electricity, milk, and bituminous coal. The report is one of a series of price studies prepared for the Temporary National Economic Committee by the Bureau of Labor Statistics.

Important developments in Government price control in the United States began in the latter part of the nineteenth century with the regulation of railroad rates. During the first 15 years of the present century the move toward regulation of other public utilities such as electricity, gas, water, and telephone service swept through the States. In the same years the antitrust policy, which had received statutory pronouncement in the Sherman Act of 1890, was clarified by judicial interpretation and, in 1914, it was elaborated in the Clayton and the Federal Trade Commission Acts.

This crystallization of American public policy to meet the great changes occurring in industrial structure over the preceding half-century envisioned two classes of industry, "natural monopolies," or public utilities, versus competitive industries, and a two-sided policy of control, public regulation of price and some other matters for the monopolistic utilities and preservation of the freedom to compete in the other industries through antitrust laws.

Experience during the first World War probably strengthened the trend toward private cooperative controls and the extension of public controls, but its influence does not seem to have been decisive.

In the past 15 years increasing dissatisfaction on the part of various groups has been manifested with this general standard of public policy. Many businessmen and farmers have pressed for relaxation of the antitrust laws to permit private cooperative or associative control devices to "stabilize disorderly markets" and prevent "ruinous competition." The depression of the thirties intensified these demands and led to more requests for Government assistance in "stabilizing" or raising producer incomes through price control. Labor desired that employers be obligated to bargain collectively. The N. R. A. and the A. A. A. were both designed to meet these demands in some measure.

At the same time there was a growing appreciation of the inadequacy of Government regulation of public utilities as it had been practiced under legislative and judicial handicaps. In part this led to advocacy of removal of statutory and judicial limitations upon regulatory commissions, in part to greater interest in public enterprise.

Out of all these criticisms of the old public policy have come many proposals for extension of Government price control into industries heretofore unregulated. The virile ghost of N. R. A. lives on in Federal regulation in bituminous coal. Direct or indirect price control has now obtained for several years in the case of many agricultural commodities. Public utility regulation has been resuscitated in several States and by the Federal Government in the area of interstate commerce. The Federal Government has also embarked upon public enterprise in electricity.

This report presents a survey and appraisal of selected instances of public price control with the purpose of increasing the knowledge on this subject available to help in shaping future public policy. Part I contains a study of State regulation of electric rates in three States, representing a sample of the most effective State control, and Federal pricing of electricity in the Tennessee Valley. In part II the Federal milk control program and five instances of State milk control, which exhibit marked differences, are examined. Part III presents an analysis of the price-control provisions of the Bituminous Coal Act of 1937. In part IV the editor of the report has undertaken a summary and analysis of the material in the underlying monographs.

Each of the four monographs treats the objectives, standards, and results of public price control in relation to three major economic problems:

(1) The general level of all the prices of a firm or industry; that is, the relation of its general level of prices to such elements as income, investment, costs, or employment.

(2) The structure or pattern of the different prices charged to different groups of consumers; that is, the relation of individual prices to each other and to costs and demands.

(3) The relation between prices, or price changes, in a firm or industry to the volume of employment of labor, equipment, and funds in the economy as a whole.

The third problem—that of the relation of objectives and standards of Government price control to depression and recovery—may be dealt with very briefly. Paramount though it may be in relation to the general economic well-being, it has been accorded very little attention either in the legislative prescription of standards of price control or in their administrative interpretation. Thus, it seems to have been almost completely ignored in the case of coal regulation. Although public utility commissions endeavored to reduce rates in the depression years of the thirties, partly with the evident purpose of helping to promote recovery, they developed no incisive analysis of how this result might be achieved nor any standards clearly related to it. Neither the Tennessee Valley Authority Act and its amendments nor the rate policies of the Authority set forth any standards related to this problem.

Alone of the three cases of control here examined, milk control by the Federal Government and by some of the State governments was adopted partly, at least, on the ground that it would promote recovery. However, none of the standards developed by the A. A. A. and by State milk control agencies (in the five States studied) are related in convincing fashion to attainment of this objective.

Hence, it must be concluded that in the cases of public control studied in this report neither legislatures nor control agencies have

developed economic standards for pricing which would promote a higher level of use of economic resources in the whole economy. Where the problem has not been entirely ignored the policies used in treating it have been based on vague or general assumptions about the relations between prices in a given industry or firm and the level of use of resources in the whole economy that are either demonstrably false or highly questionable.

This leaves the first two problems enumerated; that related to the general level of prices and that pertaining to the structure or pattern of prices. In the cases described in this report, primary attention has been devoted to the former—the general price level—both by legislatures and by regulatory commissions. In dealing with this problem, however, the results of this study show marked differences in objectives and standards, not only between the three industries examined but also between different instances of control in the same industry.

In regulation of the general level of rates of an electric utility the principal aim has been as a rule to insure that consumers are not forced to pay extortionate rates. Regulatory commissions have been severely handicapped by both court decisions and by statutes. Forty years ago the Supreme Court laid down the rule that rates must yield a "fair return on the fair value" of the property of a public utility company, and has since consistently refused to set forth a clearer standard. This rule of "fair return on fair value" is really applicable only as a standard of fairness in treatment of past investments at the time regulation is first imposed or whenever subsequent alteration in the regulatory statute substantially changes the "rules of the game." It is not suited to developing economic standards for rates that will result in the maximum possible consumption of electricity consistent with insuring sufficient income from the investment to attract capital as demand expands and additional equipment is needed.

In refraining from amending utility statutes—which typically provide that rates shall be "just and reasonable"—so as to distinguish between the problem of fairness to past investments made upon past expectations and to lay down explicitly for the future the principle that rate levels shall be such as to encourage maximum economic consumption, legislatures have abdicated their function. Nor have the commissions themselves attempted this desirable analysis of the problem, perhaps partly because of the fear of court reversal.

The result has been that commissions have not developed definite economic standards for the promotion of maximum economic consumption. The three commissions studied—Wisconsin, New York, and Illinois—which are among the most effective in the country, have evidently endeavored to set rates so as to yield an ordinary or normal return on actual prudent dollar investment. In this the commissions of Wisconsin and New York have made great progress in the past decade through the development of accounting records and the process of routine checking of rates of return and by the ordering of rate reductions whenever the results for a given year show returns above the rate (usually 6 percent) considered normal. In Wisconsin and Illinois the commissions have made use of the so-called "objective rate" as a device to test out the elasticity of consumption at lower rates and thus provide an indication of the profitability or unprofitability of a reduction in the general level of rates.

Out of all these criticisms of the old public policy have come many proposals for extension of Government price control into industries heretofore unregulated. The virile ghost of N. R. A. lives on in Federal regulation in bituminous coal. Direct or indirect price control has now obtained for several years in the case of many agricultural commodities. Public utility regulation has been resuscitated in several States and by the Federal Government in the area of interstate commerce. The Federal Government has also embarked upon public enterprise in electricity.

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Two aspects of the process of rate reduction by these commissions suggest, however, that as a rule rates are not at the lowest level which would barely yield ordinary returns on actual investment. First, rates are not reduced until after excess annual earnings have appeared. Second, in estimating the amount of reduction that will remove the excess increment of earnings, the commissions typically base their calculations on the existing or past volume of consumption. They evidently believe that estimates of probable consumption at lower rate levels would not be regarded by the courts as conforming to law.

The standard which these commissions have come to implement quite effectively contains, however, some confusion between the problem of fairness to past investments and the problem of obtaining maximum economic consumption. It cannot satisfactorily solve both problems together, and it is not well suited to treatment of the second problem in a dynamic economy characterized by progress and obsolescence, shifts in population and industrial location, and broad changes in price levels.

In the Tennessee Valley Authority Act Congress appears to have laid down a standard for the level of electric rates that accords closely with that used by the three State commissions studied—a level of rates that covers the full costs of production and marketing including an ordinary return on actual dollar investment. To this there appears to be one qualification. The language of the act seems capable of interpretation to require that electric revenues should yield, over and above an ordinary return, sums sufficient to retire gradually the bonds issued to finance the investment. The T. V. A. is not, however, subject to what the State regulatory commissions believe to be a legal bar against consideration of the probable elasticity of consumption at lower rates. Studies of expected consumption have constituted an important part of the process of setting T. V. A. rates, and the large per capita consumption in the valley at rate levels much below those in most other sections of the country has influenced the rate policies both of private electric companies and of State commissions.

With respect to the general level of prices in milk and in coal, public control has sought to raise or maintain incomes above levels that would prevail without Government control.

THE LEVEL OF MILK PRICES

During the post-war decade cooperatives organized by milk producers achieved appreciable gains for their members by raising the prices of fluid milk and cream relative to the prices of milk going into butter, cheese, ice cream, and other manufactured dairy products. Under the severe strain of the depression in the early thirties they were unable to maintain these margins, and milk producers began to urge a program of public control to assist the cooperatives in holding fluid milk prices at a profitable level.

Federal milk control has operated under the general price standard of agricultural legislation; that is, the return to "parity prices." At first this meant prices which would give agricultural commodities a purchasing power, in terms of industrial goods equivalent to that prevailing in a base pre-war or post-war period. By the terms of the Agricultural Marketing Agreement Act of 1937, however, the Secretary of Agriculture is empowered to adjust these parity prices upward if

he finds that they "are not reasonable in view of the price of feeds * * * and other economic conditions which affect market supply and demand for milk and its products."

In practice it has proved impossible to attain parity prices in most markets under Federal milk control. Competition of fluid milk from other markets, unregulated by Federal authorities because interstate commerce was not involved, and competition from producers whose milk was formerly sold largely for manufacture of butter, cream, and other manufactured products have imposed practical limits on the level of fluid milk prices that kept them below parity. Consequently the objective seems to have been to fix the highest milk and cream prices in each market that could be maintained successfully. The authorities compute two guiding standards. The "historical" standard, which is ordinarily considered the highest attainable price, is based on the current price of butter plus the average differential between milk and butter prices in the late twenties, with adjustments for changes in quality and costs. The "competitive" standard represents the current price of milk for manufactured products at the edge of the milkshed plus transport expense and the extra costs of producing fluid milk. The price seems to be fixed between these two limits, but as close to the upper limit as is deemed possible.

Of the five cases of State milk control studied in this report—California, Wisconsin, Oregon, New York, and Indiana—California alone exhibits a definite standard for minimum producer prices of fluid milk. In that State the control agency is directed to set minimum producer prices so as to cover the average full extra costs of producing fluid milk for beverage consumption as compared with producing milk for manufactured dairy products including ordinary return on investment. In Wisconsin the statutory directives are vague. The control agency moved in the direction of a standard of full cost of production, including ordinary return on investment and reasonable wages for farmers and their families. But in the absence of any control of entry to fluid milk markets it proved impossible to apply this standard. The authorities have apparently set prices as high in relation to this goal as they thought could practicably be maintained with whatever control of sales volume the local cooperatives were able to achieve.

In Oregon neither objectives nor standards are definite in avowal. In practice prices of fluid milk are apparently set at the most profitable level, given rigid control of entry to the market and a scheme of payments to producers of fluid milk according to sales quotas that discourages expansion of production for the fluid milk market. Of the five cases of milk control studied here, Oregon exhibits the strongest monopoly control.

In Indiana both legislative and administrative objectives and standards relative to the level of milk prices are vague and indefinite. Here the reason seems to lie in the adoption of the principle that, within broad limits at least, collectively bargained prices are desirable prices. Apparently the administrative agency follows in large measure a policy of enforcing the prices determined by bargaining between cooperatives and distributors, limiting entry to fluid milk production whenever there is a danger that new entrants would render these prices difficult to maintain.

Between 1933 and 1937 New York followed a policy of control of producer prices of fluid milk which was somewhat similar to Indiana in

its emphasis on participation of producers and distributors in price making and in moderate control of entry, although one gains the impression that the New York board took a large part in the determination of prices. In 1937 New York adopted the general principle of encouraging machinery for collective bargaining of prices and supervising this process rather than participating in it in substantive fashion. The control agency is now empowered to fix prices itself only on petition of producers. No standards were laid down limiting the lawful range of prices determined by collective bargaining. For State price fixing, when that is requested, vague standards are provided as in earlier laws.

In all five States and in markets under Federal control it seems unquestionable that public control has raised fluid milk prices, during part of the time at least, above levels which they would otherwise have attained. Whether this has increased producer incomes depends, of course, upon the effect of these higher prices upon the volume of sales, but it appears that there has been some increase. Producer incomes have also probably been enlarged through inauguration of better auditing of distributor accounts which has minimized incorrect payments to producers.

All five States have fixed wholesale and retail prices, although this feature was abandoned by New York in 1937. Here again California alone provides definite standards. In this State an attempt has been made to apply a rather complex standard calling for prices that will return the full costs, including return on investment, of such a number of efficient distributors in each market as is needed to meet the demands of consumers. New York has also made some endeavor to encourage efficiency in distribution. In the other States standards are vague and the aim seems to have been merely to ensure adequate margins so as to discourage cutting of producer prices. In order to protect the existing system of house delivery the differentials between home delivery and store or milk-stand sales have been largely abolished in some of these States.

THE LEVEL OF PRICES IN BITUMINOUS COAL

The Bituminous Coal Act of 1937 provides for minimum price fixing in this industry characterized by large excess capacity, a great number of firms, and highly specialized, immobile labor. The evident aim is to prevent price cutting in order to enable maintenance of collectively bargained wages and better returns to operators than would otherwise be obtained. The principal standard for the general level of coal prices in a price-fixing area (of which the law specifies about 10) is equality between the average realization per ton and the weighted average cost per ton in that area in 1936 adjusted for subsequent changes in cost per ton. Cost as defined in the law includes no return on investment. The coal price level is to be adjusted upward or downward after changes in weighted average cost of 2 cents per ton have been demonstrated. This means, of course, that prices must be fixed on the basis of past or current consumption and estimates of increased sales through lower prices cannot be introduced into the calculation.

Consequently the same conclusion obtains in the case of minimum price fixing in coal as in the case of maximum price fixing in electricity—maximum economic consumption can be approximated only if prices

are fixed according to the best estimates of future consumption and future costs, and for this the act fails to provide.

There seems little question that it will be very difficult to adjust minimum prices rapidly to meet short-time changes in demand, both because of the requirement that determinations must be based upon past costs, and because of the inevitable delays inherent in almost any form of commission regulation. Moreover, during periods of depressed business conditions and falling sales, higher unit overhead costs may prevent price reductions for the purpose of restoring demand, or may even make it necessary to establish higher prices, although the contrary policy is clearly indicated.

With respect to the process of relating the prices of different companies and districts, the emphasis of the law seems to be on "just and equitable" price relations and the preservation of "existing fair competitive opportunities." No definite standards of economic efficiency relative to this problem are contained in the law.

The Coal Act of 1937 provides for fixing of maximum prices when necessary to protect consumers against unreasonably high prices, such as might occur in wartime. Maximum prices are to be fixed at a uniform margin above the minimum prices within each district so as to yield a reasonable return above weighted average cost. However, a proviso that "no maximum price shall be established for any mine which shall not yield a fair return on the fair value of the property" makes this provision virtually unworkable.

Legislatures and control agencies have paid much less attention to problems of the pattern or structure of prices to different groups of consumers than they have devoted to problems of the general level of prices of a firm or industry.

The three State utility commissions studied, for example, have achieved much in the way of simplification and standardization of rate forms and in designing forms which facilitate assessment against each customer of those costs for which he is specifically responsible. However, when it comes to the substantive problem of how the total costs including return on investment are to be spread over the several groups of consumers, e. g., industrial, commercial, and domestic, the three commissions do not seem to have developed any clear criteria. They have, indeed, endeavored to set rates such that no consumers are served at rates below ascertainable increment costs; that is, below the added direct costs involved in serving them. But in deciding how much of the overhead is to be contributed by each of the different classes of consumers the commissions seem to act upon general ideas of fairness, taking into account the relative volume and nature of protests, and the desire to improve consumption and utilization of capacity, without any particular definable principles. The evident influence of the relative volume of protests from different groups and the typical procedure of estimating the effect of rate reductions on income by applying the reduction per unit to the volume of consumption in a previous period, without allowance for elasticity of consumption—these two factors suggest that rate patterns are not those which would, in fact, promote maximum economic consumption. Pursuit of this objective would require standards whereby consumers with the greatest elasticity of consumption (at lower rates) were given the lowest rates. Concretely excess income would be removed by reduction of rates to these consumers whose consumption would

increase most per unit of reduction in company income, instead of lowering rates to those groups which have protested most vigorously, or lowering rates equally to all consumers.

In the design of the rate structure T. V. A. seems, in general, to have followed the policies of the leading State commissions. There is little to indicate that it has given any greater attention to the problem of the best pattern of apportioning overhead among the different classes of customers. However, the intensive consumption studies carried on by T. V. A. and its evident emphasis on the relation between rates and consumption encourage belief that it may make advances in the pattern of rates as well as in the level of rates.

In the control of milk, also, different class prices exist in all the States treated in this report and in milk markets under Federal control. The milk control programs require at least 2 class prices—one for fluid milk and one for milk going into manufactured products, but the actual number of class prices in use varies from 2 to 10 in different markets. Given the objective of increasing producer incomes and given the impossibility of raising the price of milk for manufactured products significantly, it follows that the control programs must center directly on the raising of the price of fluid milk.

Of the six instances of public control of milk prices, California alone has set up a clear-cut statutory standard for the relation of class prices. As explained above, the minimum price of fluid milk in California is to cover the full extra costs of milk for fluid consumption above the cost of manufacturing milk. In Oregon the milk control board fixes only one price, that of fluid milk. Since the markets for fluid milk and manufacturing milk seem to have been quite effectively separated in Oregon, the price of fluid milk is evidently set in no particular relation to the price of manufacturing milk.

In Wisconsin, Indiana, and New York prices for one or more classes of manufacturing milk have been fixed according to formulas based on the wholesale prices of manufactured dairy products, with the evident purpose of ensuring payment to producers of the best obtainable price for surplus fluid milk that must enter manufacturing outlets. For a time in 1938 and 1939 all nine price classes in the New York metropolitan area (under a joint State and Federal order) were determined by formulas. In general, however, no clear-cut criteria have been involved for the relations between prices of fluid milk and prices of manufacturing milk in the control programs of these three States.

The A. A. A. has come closer to development of a definite standard for the relationship of fluid milk prices and manufacturing milk prices. Fluid milk prices seem to be set at the highest practicable figure above the price of manufacturing milk at the edge of the milkshed with appropriate adjustments for transportation expense and other extra costs. The price relationship aimed at is evidently the widest spread that can be maintained—that is, the widest spread that will not encourage diversion of manufacturing milk into the fluid milk markets—given whatever control of volume of fluid milk the cooperatives are able to establish.

Experiments with low prices for milk sold to relief recipients seem to indicate an elasticity of consumption in this group of consumers. It is not clear whether this elasticity is great enough to enable maintenance of producer incomes without raising milk prices to other

groups. In a number of instances this question has been rendered irrelevant through the use of Government subsidy.

Turning to the Bituminous Coal Act, one finds more legislative attention to the problem of the price structure. Several considerations governing price differentials are laid down in the act, but these are couched in language which conveys no definite measurable content. Instead, the control agency is furnished with a set of considerations which seem to be reducible to two general criteria: (1) Prices shall reflect the relative market value of different kinds, qualities, and sizes of coal and (2) prices shall be fair to all producers and all consumers. Evidently the law, as worded, would permit either the continuance of essentially the same pattern of prices as previously existed or inauguration of appreciable changes in pattern. Although the law permits differences in prices of the same coal in the same geographical market when it is consumed in different uses, no criteria for such price differences are specified. Everything plainly depends on the nature of the concrete standards which the control agency develops and applies.

CONCLUSION

In conclusion, legislatures, administrative agencies, and courts have given most attention to objectives and standards related to the general level of the prices of a firm or industry. Although distinct advances have been made in treating this problem, especially in the field of electric utilities and in milk control in California, it still remains true that adequate, workable standards to promote maximum economic consumption have not been developed. This is partly ascribable to pursuit of other objectives.

Less attention has been devoted to the problem of the pattern or structure of prices to different groups of consumers. Few noteworthy advances in this area have been discovered in the present study.

When it comes to the problem of greatest importance in the past decade—the relation of price behavior in a particular firm or industry to depression and recovery in the economy as a whole—it appears in large measure that the problem has simply been neglected. In the case of milk, where an avowed aim of price control was promotion of general recovery, it appears that the measures adopted were more likely to work against recovery than to promote it. But the most important conclusion of this report is that the major problem of the three has been largely neglected or treated without adequate understanding of its nature.

One other conclusion should be emphasized. Both legislatures and administrative agencies have often failed to state standards in clear-cut, definite fashion. With regard to certain problems of long standing on which there is abundant accumulated experience, it would seem that legislatures could and should specify standards more definitely. With regard to newer problems, this is probably either impossible or undesirable. Here the function of the legislature should be merely to prescribe the general objectives. Administrative authorities should, however, develop definite standards and make them explicitly clear so that the groups affected know the rules of the game and so that legislatures may have a sure basis for further study of the problem, assessment of the present method of treating it, and consideration of improvement in objectives and standards.

PART I
PUBLIC PRICING OF ELECTRIC POWER

By
BEN W. LEWIS

PREFACE

The electric power industry, in common with other public utilities (gas, telephone, telegraph, and water), has been involved in unusual relations with the Government and has been the subject of increasingly intensive control by governmental agencies, almost since its inception. Indeed, governmental activity has been accepted for so long as an integral part of the set-up whereby electric power is produced and distributed to consumers that any large-scale withdrawal of the Government is scarcely conceivable; and any inadequacies in the system of control serve almost universally to suggest only an increase or intensification of Government activity rather than a lessening.

The key to the regulation of electric power is to be found in the tremendous importance of the industry to the social and economic life of the country, together with the fact that for physical and economic reasons electric power must be sold generally under such conditions that competition cannot be depended upon to insure adequate, continuous service at satisfactory prices. Electric power companies must secure permission to occupy and cross public highways with their poles and cables; rendition of their service requires a physical connection between the properties of producers and users, with the result that as a practical matter only one seller is available immediately to any buyer; and the technical characteristics of the production of electric power are such that there is a strong tendency for any competition in the industry to develop along unusually vigorous lines, with a consequent elimination of all competitors save one. Public policy and the law have long regarded the supplying of electric power as a "natural" monopoly, and, almost as a matter of course, have substituted positive governmental action for the ineffective process of competition in the control of price and service.

Over the years, regulation of electric power has been undertaken through various means—by judicial decisions in private suits to enforce common law obligations of "public callings," by special provisions in State charters and municipal franchises, by State statutes and municipal ordinances, and by regulations and orders issued by administrative commissions acting under authority conferred by legislative enactments. Contemporary regulation of the electric power industry is very largely commission regulation, which is undertaken by every State (with one exception) and by the Federal Government. Typical regulation seeks to control the quality, extent, and adequacy of service and its price, and, as ancillary to these principal functions, to control utility accounts, capitalization, and intercorporate relations.

Under those provisions of the Federal Constitution which forbid the State and Federal Governments to take private property without due process of law, electric utilities might conceivably seek to forestall by judicial action the entire institution of Government regulation of their prices and service. It is noteworthy, however, that although regulation of prices has been held by the courts to be beyond the power of legislatures in the case of many industries, the right of the Government

to regulate electric utility prices has never been seriously questioned. On the other hand, the methods, standards, and procedures of electric utility regulation have been subjected to the closest scrutiny and supervision by the courts. It is not too much to say that the present system of utility prices under regulation, with whatever may characterize it in the way of rigidity, excessive expense, delay, and controversy, is in a large measure the product of judicial limitation upon legislative and administrative processes.

Traditionally, largely as a result of judicial decisions and influence, utility rate regulation has been built around the core of a "trial-at-law." Rates are set, after due notice and full hearing—the presentation and cross-examination of witnesses, the filing of exhibits, and adversary arguments. Rate cases typically drag on for months, involve the expenditure of large sums for the services of engineering and accounting experts and for legal talent, and assume generally the aspect of public causes rather than proceedings for the essential business of setting prices. In recent years, rates have come increasingly to be fixed by compromise negotiations conducted by commissions and utilities.

The main approach to rates is with reference to their level; that is, the total amount of money which the utility shall be allowed to receive for all of the services which it renders to its entire group of customers. It is generally considered that rates in the aggregate are satisfactory if they produce a total income sufficient to cover the utility's total cost—its operating expenses, taxes, depreciation, and a return to those who have furnished capital for the enterprise. Traditionally, the return to capital has been the focal point of regulatory action; and the standard set by courts, and followed without question by regulatory commissions, has been a "fair return upon the fair value of the utility property used and useful in the public interest." The Supreme Court has held from the very outset that utility rates must provide such a "fair return upon fair value" in order to meet the constitutional prohibition against depriving the utility of its property without due process of law; and commissions have generally adopted the same standard as a positive measure of rates which will be fair and which will attract sufficient capital into the industry. Neither the courts nor the commissions, however, have been clear, as to how fair return and fair value should be constituted. It is realized, formally at least, that fair value for rate-making purposes cannot be measured by "market value" or "worth"; since market value depends upon income, it cannot properly be employed as a basis for determination of what the income should be. The Supreme Court has listed several factors that must be weighed in determining the fair value of a utility property, but it has never indicated what weight should be accorded to each in the final judgment.

Over the years since the first important decision (*Smyth v. Ames*, 169 U. S. 466, 1898), two conflicting standards of fair value have taken precedence over all others: One is the actual (prudent) investment in the property; that is, the number of dollars invested and still remaining in the property. The other is the reproduction cost of the property; that is, the amount which would now have to be expended if the property were to be reproduced under existing conditions and at present prices. Each of these standards presents an array of subsidiary questions, such as those relating to the existence and measure-

ment of depreciation and intangibles. But the main battle has raged (and still rages) over actual investment versus reproduction cost. It is clear that consumers would benefit and utility owners would be disadvantaged if an actual investment standard were employed during a period of generally rising prices, that the opposite results would obtain if reproduction cost were used during such a period, and that this situation would be reversed during a period when prices in general were falling. The issue became really important in the years following the great increase in prices during the first World War, and it was during this period that the Supreme Court approached most closely to identifying fair value with reproduction cost. However, it refused to take this step definitely and completely, and even today, after 40 years of rate making, the law of the land still requires that both actual investment and reproduction cost be taken into account—in undetermined proportions to be reconciled by the processes of judgment—in the determination of the rate base upon which a fair return must be allowed. There is a growing body of opinion which has come to recognize that neither actual investment nor reproduction cost has a clear advantage either in the matter of equity to consumers and investors, or in considerations of pricing principles, and also that the interests of precision, economy, and speed in rate making can best be served by placing full reliance upon actual investment as the measure of fair value. Persons of this view are convinced that the purposes of rate regulation can be attained only by the complete abandonment of attempts to determine fair value by the process of considering divergent and mutually inconsistent evidence and opinion, and then naming a figure which bears no ascertainable relation to any of the lines of evidence and is supported only by somewhat vague phraseology. The use of judgment in rate making is necessary, of course, but the processes of judgment operating without definite principle or purpose are no proper substitute for a meaningful, efficient standard in the highly purposive fixing of prices in a price-guided economy.

Little need be said of the composition of the fair return element of the rate-making formula. Compared with fair value, it has received little attention from regulatory commissions, although it is clear that variations in the rate of return are fully as significant as variations in the value based in the determination of income to investors and rates to consumers. Typically, a compromise figure is named within a range of from $5\frac{1}{2}$ to 8 percent return upon fair value.

The "fair return on fair value" formula is a rate-making tool; it is not in itself the statement of a basic objective. Indeed, it is employed in specific rate-fixing situations to reflect quite different objectives. It may be used, either quite conscientiously or as a "front," by a commission whose sole objective is to escape court reversal, or by a commission which seeks more positively to set utility prices in harmony with prices generally in the economic system. The same formula may serve where the purpose is merely to prevent rate levels that are clearly extortionate, or where the commission's aim is to promote increased consumption by naming the lowest level of rates that will yield the minimum income required for adequate, continuous service. Indeed, the formula need not stand as a barrier to the establishment of utility prices designed to encourage and facilitate the fuller employment of economic resources in general. In short, "fair return on fair value" is neither a definite objective nor a definite standard; it is an invitation to controversy on both.

It will be appreciated that to decide upon the total income which the utility is entitled to receive leaves unsolved the problem of naming the exact rates which, in light of the consumption of electricity that they will attract, will produce the desired income. Commissions generally have displayed slight initiative in this field. The need to synchronize individual rates with other related prices worked out by competition in unregulated markets (or otherwise purposively to adjust them) has gone largely unrecognized, and the effect of the rate level upon consumption has been accorded only slight consideration in rate computations. Mechanical division of desired total income by the volume of units of past consumption has been the basic procedure, and rate experimentation to see whether even lower rates, by inducing greater demand for the service, might equally result in the desired income, has been rare. In fact, one of the most serious charges to be brought against prevailing rate practices and standards is that of complacency—the absence of that drive for the lowest level of remunerative prices which, in theory at least, is characteristic of competition, and for which regulation has as yet made no effective provision. Under the law as presently interpreted, a utility may not be forced to lower its rates if its earnings are not in excess of a “fair return,” even though lower rates might reasonably be expected to bring increased demand, greater output, lower unit costs, and an equally “fair” return. It is quite unlikely that regulation has achieved the lowest level of rates consistent with the minimum returns to investors and management sufficient to induce continuous provision of adequate and efficient service.

Sometimes “promotional rates” are offered, affording lower rates to additional blocks of consumption, without disturbing prevailing rates for such assured demands for electricity as that for domestic lighting purposes. A few companies have introduced (some utility commissions have required) “objective” rates, which offer an attractively low rate for all electricity consumed beyond the customer’s consumption in a designated base period (some earlier month or year), or, as a variation, new lower rates if consumption is increased sufficiently to equal or exceed, at these rates, the amount of a designated base bill.

In devising the pattern of electric rates, commissions have recognized the existence of three separate markets for the output of any company (domestic or household, commercial, and industrial). The task of distributing the total burden of rates, i. e., the total dollars of revenue to be obtained from all users of the service, among the three classes of users has been difficult in the extreme and, for the most part, has elicited no standards more exact than a rather vague “value of service.” There is in this area no formula as definite even as the “fair return on fair value” phrase in the field of total income. Full cost of service is not a feasible standard. Determination of the “actual” full costs of serving each of the different classes of users would necessarily involve allocation of the general body of overhead expense between these different classes on some arbitrary basis. The allocation must be arbitrary because this body of cost is incurred in common for serving all customers and there is no way of ascertaining exactly what part of it is to be attributed to any one class. In general, commissions endeavor to see that the rates for each class cover at least the direct costs for which its service is responsible. The com-

mon overhead is then spread among the classes by a process of reconciling such non-cost considerations as custom, "balance," "what traffic will bear," protests and pressure, full utilization of capacity, and the like.

So, too, within each general class of users, difficult questions of differential pricing (for small and large, and regular and irregular users) are raised, for which there are no simple or "correct" answers. An analysis of the costs of serving an individual consumer shows that the utility incurs an expense for being "ready to serve" (a "demand" or "customer" cost) as well as for service actually rendered (an "energy" or "follow on" cost), but it is fruitless to attempt to fix exact responsibility, either individual or class, for these outlays. Rate forms are devised to represent, in some measure and with varying emphasis, considerations of cost and of value of service. Efforts are made to attract various groups of users, and to induce uses of varying degrees of importance. Simple meter rates are classified into "straight line" (a uniform charge per unit), "step" (a single rate applied to the total number of units consumed, the rate varying with the total quantity consumed), and "block" (a named rate for all of the units taken in specified blocks, for example, the first 30 units at 7 cents per unit, the next 30 at 6 cents, etc.). A minimum charge may be provided with any of these forms. More elaborate rate forms embody separately billed charges, the first based on the cost to the utility, however determined, of readiness-to-serve, and the second reflecting the actual consumption of energy. Sometimes the readiness-to-serve charge is concealed by setting a relatively high energy rate for the first few units of service, beyond which lower "follow on" rates apply. Demand or customer charges may be estimated and made uniform for each customer, may be found by meter measurement of the customer's maximum demand during a stated period, or may be estimated for each customer by some indicator of his possible maximum demand ("load-count" or "room-count"). In the control of rate structures, as in the setting of rate levels, it seems unlikely that regulation has approached closely to the attainment of fullest use of facilities at minimum cost.¹

It will appear later in this report that the most effective of the country's regulatory commissions have gone far beyond the objective merely of protecting "rights" of investors and preventing "extortion" of consumers; that, while they have kept sufficiently within objectives acceptable to the courts to make their orders effective, they have sought consciously to establish rate levels and patterns conducive to a more complete use of electric facilities. Their efforts have been undertaken with a practical eye to the demands of the competitive situation, even though they have not always talked in such terms as "synchronization," and "allocation of economic resources." It would have been possible, as suggested above, for these commissions to have

¹ The writer has said, in another connection: "It may be suggested that, insofar as possible, electric rates should be so arranged as to cover the ascertainable costs in the case of each user, spread the burden of non-imputable costs equitably, and conduce to maximum use of facilities. It seems probable that these ends could be satisfactorily approached by a pattern of two-part rates, the second part of which would be constituted by an energy charge, uniform to all consumers, equal to short-run marginal cost of producing the service, and the first an initial or demand charge covering all other costs. The demand charge would be adjusted as between consumers (or classes of consumers) so as to cover as a minimum for each the ascertainable fixed and constant costs for which his (its) presence on the system is directly responsible, and in addition such proportion of the remaining burden of cost as seems just and expedient in light of equitable and market considerations. Such rates would cover total costs, and would be as fair as rates constructed on any other pattern. Further, the relatively high charge for availability of the service (or for very early brackets of consumption) would coincide with the relatively high value to the consumer of early uses, and the sharp drop in rates for all or most of the energy taken should greatly stimulate consumption." See *Government and Economic Life*, the Brookings Institution, Washington, 1940, vol. II, pp. 713-714.

directed their rate policies to the attainment of even more remote objectives, specifically, to have attempted through control of utility prices to influence the rate of utilization of general economic resources. This possibility, of course, is of particular significance during such periods of economic depression as this country has known in the past decade. It may be pointed out here, however, in anticipation of the fuller report in succeeding pages, that, while utility commissions have made some effort to revise the rates of electric utilities in keeping with what they have felt to be the pressures of economic depression, they have not dreamed of exercising their powers in the establishment of rates designed to relate the incomes of customers, the incomes of producers, or the capital demands of producers to a desired increase in the use of the country's total economic resources. They have not been particularly conscious of the problem, and they have not been aware of any power vested in them to proceed along these lines. Further, they are not aware of the existence of any well developed principles or any convincing set of standards that would make feasible any such action on their part.

The following chapters undertake a brief, intensive survey of the pricing policies of three of the country's leading State public utilities commissions—Wisconsin, Illinois, and New York, in order—together with the pricing policies of the Tennessee Valley Authority, to date the Nation's leading experiment in the employment of public ownership of electric utilities as a rival of or adjunct to private ownership under regulation. A study of such well-established public pricing agencies should throw light upon the possibilities inherent in wider extension of positive public control over industries hitherto unregulated. Two observations are in point in this connection: (1) Such existing inadequacies of public utility regulation as may be disclosed are by no means completely inherent in the regulatory task itself—they grow largely out of features of our governmental institutions which are quite capable of correction within the existing framework; and, (2) lessons derived from the regulation of prices of local monopolies, although significant for their broader implications, are not to be applied bodily without modification to the task of regulating prices of competitive goods in Nation-wide markets.

A final word seems called for in light of comments made by commission representatives to whom an early draft of this manuscript was submitted. Any inquiry into commission policies must rely to a very considerable extent upon the commission's written record. There are other sources of information, but they cannot be cited in support of statements and their chief value must reside in the aid which they lend to realistic interpretation. It is clear that commission opinions do not afford a record of all the considerations that have crossed the minds of the commissioners during their deliberations. For many reasons the commission may abbreviate its discussion or guide it quite consciously away from points which, while both pertinent and of great interest for certain purposes, are not essential to the determination of immediate issues. The commission may hesitate to use "fifty dollar words" when it can avoid controversy by offering an explanation in simpler, more "orthodox" terms. Nonetheless, a careful analysis of commission policy on the basis of the only completely usable record cannot properly fail to note the fact that the record offers no evidence that certain principles or considerations were

given weight in the determination of policy. The discussion that follows is concerned with an analysis of such facts relating to commission policies as are known to the writer; conclusions and final judgments on the facts are not the task of this paper. It is often true that the opinions of a commission, which of necessity cannot be complete in all details, fail to disclose any interest in a certain doctrine. When such a comment is made in this report, there is no intention to indicate approval or disapproval, either of the lack of interest, or if the interest is really present, of the lack of disclosure. This report merely states the situation as it is disclosed by the records and by officials of the commission.²

² All of the matters discussed briefly in this introduction are dealt with by the present writer at greater length, in a more complete setting. See *Government and Economic Life*, the Brookings Institution, Washington, 1940, ch. XXI.

CHAPTER I

THE WISCONSIN PUBLIC SERVICE COMMISSION

The standards of pricing employed by the Wisconsin Public Service Commission in controlling and setting the rates charged by private companies for electric power and other selected public utility services have developed over a period of many years. Wisconsin has been a pioneer and leader in the field of administrative commission regulation of public utilities. Since 1930 it has consolidated its position in this field by statutory changes and administrative action. The Wisconsin Public Service Commission at the present time stands easily within the topmost group of State utility commissions, in terms of continuous expert regulation. Here, if anywhere among the agencies of public price control, will be found an effective combination of public purpose, insight and technical competence. The Wisconsin commission is unique among its companion agencies in the United States in either the fact or degree of (1) the consideration it gives to general economic conditions in setting rates, (2) the positive control it asserts over utility rate structures, (3) the examination it makes of, and the revision it frequently introduces in, utility estimates of operating expenses, (4) its supervision and the use which it makes of utility accounting records, and (5) the continuing day-to-day supervision which it asserts over the rates and returns of the utilities within its jurisdiction, and its employment of negotiation rather than formal rate proceedings in the frequent adjustment of rates.

It should be noted at the outset that there is little that is unusual in Wisconsin statutes governing utility regulation. The role of the Wisconsin Legislature has been to provide statutes that facilitate (but do not insure) effective regulation, and funds to permit an effective program to be carried out. The positive direction of regulation and the determination of regulatory policies within the general framework of "reasonable rates" and "adequate service" has been in the hands of the Public Service Commission and its relatively large and competent staff. Electric utilities are required by statute to "furnish reasonably adequate services and facilities," at "reasonable and just" charges,¹ and the commission is "vested with power and jurisdiction to supervise and regulate" every such utility.² The statutes present no standards of reasonableness or adequacy. All utilities must file schedules of rates with the commission, no changes in schedules may be made except upon 10 days' notice to the commission; and no increases in rates may be made without the commission's written approval following investigation and hearing.³ Rate investigations may be made by the commission, either upon complaint, or on the commission's own motion.⁴ Provision is made for full notice and hearings prior to the issuance of a rate order;⁵ but

¹ Wisconsin Statutes, 196.03.

² Ibid, 196.02.

³ Ibid, 196.19 and 196.20.

⁴ Ibid, 196.26 and 196.28.

⁵ Ibid, 196.20, 196.21, 196.26, and 196.29.

the commission may temporarily alter any existing rates at any time and for such a period as the commission may prescribe, "when deemed by it necessary to prevent injury to the business or interests of the people or any public utility in case of any emergency to be judged of by the commission."⁶ The commission has, in support of its rate-making powers, very substantial powers over utility accounts,⁷ depreciation,⁸ finance,⁹ and intercorporate relations.¹⁰ The commission is composed of three commissioners appointed by the Governor, and a staff of approximately 230 members.

The following discussion of its activities in determining pricing standards will proceed within three areas of price policy, each of which, although inextricably interrelated with the others, may properly be isolated for purposes of analysis—the level of rates, their pattern, and their relation to cyclical fluctuations in business activity, that is, the "moving level" of rates.

THE LEVEL OF RATES

In all formal proceedings the Wisconsin commission employs the orthodox approach of setting (or confirming) rates at levels which are designed, when applied to the amount of consumption in past periods at rates then prevailing, to produce an annual income sufficiently high to cover estimated operating expenses (including annual depreciation and taxes), and to afford a "fair return upon the fair value" of the utility property "used and useful in the public service." The commission is concerned with returns from year to year, and attempts no program of averaging returns over a longer period. Frequent rate adjustments in light of actual operating experience constitutes the commission's approach to this problem.¹¹ The commission is eclectic and opportunistic in its choice of a base or "fair value" upon which to calculate a "fair return." "Fair value" is whatever seems feasible to the commission in a particular proceeding.

The starting point of a commission inquiry into the reasonableness of a utility's rates is the book value of the property—the cost of used and useful fixed capital less the depreciation reserve, plus allowances for working capital and materials and supplies. If a preliminary analysis of a utility's annual report indicates a net operating income above 6 percent on such book value, and no countervailing circumstances appear, negotiations are begun by the commission looking toward an uncontested reduction in rates calculated to eliminate the excess above 6 percent.¹² If the negotiations fail and a formal

⁶ Ibid, 196.70.

⁷ Ibid, 195.06-.08.

⁸ Ibid, 196.09.

⁹ Ibid, 194.61-.14.

¹⁰ Ibid, 196.52 and 196.525.

¹¹ It is interesting to note that in the first years following its inception, the commission pioneered with the so-called "Wisconsin" or "early deficit" method of calculating going value. The essential feature of the method was that the amount by which a utility failed to receive annual earnings covering all costs including depreciation and a "fair return on fair value," during a reasonable development period, was added to the rate base upon which returns were calculated in succeeding years. Surplus earnings in any year were permitted to offset deficits. Going value so calculated was considered by the commission in arriving at fair value; it was never employed as an exact measure. The method went out of use in Wisconsin during the twenties. See Ben W. Lewis, "Going Value and Rate Valuation," 26 Michigan Law Review, 713 (1928), pp. 725 ff.

On the early theories and policies of the Wisconsin Commission, see R. L. Hale, *Valuation and Rate-making, The Conflicting Theories of the Wisconsin Railroad Commission, 1905-17* (New York, 1918).

¹² See Lake Superior District Power Co. case, 16 Wis. P. S. C., 266 (1937).

For a typical letter from the commission to a utility, instituting rate reduction negotiations on the basis of an analysis of the utility's annual report, see appendix I. Negotiated rate adjustments with or without formal hearings and orders, account for the preponderant proportion of rate reductions, and most negotiations result in uncontested reductions.

proceeding ensues (or if such a proceeding develops from a consumer complaint) it is fair to say that the commission will prefer to use book value or original cost as its measure of fair value if it has reason to believe that the utility will be satisfied with the resulting order and that no court test of the value finding will follow.¹³ If, from negotiations, however, there appears a substantial likelihood that the utility will appeal to the judiciary from the commission's finding, and that a "full-dress" court proceeding will ensue, the commission, in deference to the rule of the Wisconsin courts, will lapse into a finding of a "fair value" which reflects consideration, in indeterminate proportions, of original cost and reproduction cost at current prices.¹⁴ Whatever its finding in specific cases the Wisconsin commission has evidenced no deep concern over theoretical doctrine in the matter of the rate base. Its restrained tendency to employ book value or original cost as a rate base probably expresses no feeling or economic ideology other than "fairness" and "workability"; its forced use of reproduction cost and its reluctant acceptance of a hybrid fair value probably reflects no desire other than to keep within a law which, however much it may contribute to ineffective and clumsy rate making, is deemed nonetheless to be controlling. The literature of rate valuation contains many elaborate defenses of the reproduction cost method, all of them revolving about the proposition that utility prices based on reproduction cost valuations will be in harmony with the price structure of unregulated competitive industry generally, and will conduce, thus, to such an allocation of capital and labor between regulated utilities and other industries as will best meet consumer demands.¹⁵ There is much reason to believe, on the other hand, that this proposition is quite incorrect, that is that utility prices based on reproduction cost are not the exact economic counterpart of market-determined prices in the unregulated area; and that utility prices derived from an original cost rate base coupled with a variable rate of return are as likely as those based on reproduction cost to be in harmony with the market prices worked out in unregulated industry.¹⁶ Again, from an administrative point of view, in terms of economy, speed, and certainty, the original cost method of setting a rate value or base is much to be preferred over the clumsier reproduction cost method.

¹³ See 3 Wis. P. S. C. 109, 114 (1932); 3 *ibid.*, 63, 75 (1932); 4 *ibid.*, 160, 172 (1933); 15 *ibid.*, 300, 313 (1937); and 15 *ibid.*, 315, 317 (1937); as well as a whole series of cases in volumes 6, 7, and 9 of Wis. P. S. C. (See volume indexes, under "Valuation.") Book values were adjusted in 10 Wis. P. S. C. 373, 377 (1935); 10 *ibid.*, 3-1, 349 (1935); and 8 *ibid.*, 353, 365-367 (1935).

No formal test of the difference between book value and original cost to the first utility user of the property, nor of the disposition of, or allowance to be made for any excess of the former over the latter, has yet been made. See *Wisconsin Valley Power Co. case*, 3 Wis. P. S. C. 160 (1932).

The commission has undertaken to develop a set of continuous property records, covering every utility in the State, which will serve as a factual basis for the development of original cost (or reproduction cost, or any combination of the two) figures in any case. The program, for electric properties, is now about 40 percent completed. The commission has been one of the leaders in the institution of original cost accounting. See 1932-34 Biennial Report of the Wisconsin Public Service Commission, pp. 18 ff.

¹⁴ See *Waukesha G. & E. Co. v. Railroad Comm. of Wisconsin*, 191 Wis. 565 (1927), setting aside the order in *Re Investigation of Gas Rates of Waukesha G. & E. Co.*, 26 Wisc. R. C. R. 791 (1922), on the authority of *McCordle v. Indianapolis Water Co.*, 272 U. S. 400 (1926), and reversing *Waukesha G. & E. Co. v. Railroad Comm. of Wisconsin*, 181 Wis. 281 (1923).

For a typical "fair value" valuation see the *Wisconsin Telephone Co. case*, 12 Wis. P. S. C. 1, 81-139 (1936); and on a much smaller scale, the *Farmers New Era Telephone Co. case*, 12 *ibid.*, 277, 291-292 (1936). Note that the elaborate long drawn out "fair value" ritual employed in the *Wisconsin Telephone case* resulted in a rate base corresponding closely to straight book value.

¹⁵ See F. G. Dorety, "The Function of Reproduction Cost in Public Utility Valuation and Rate Making," 37 *Harvard Law Review*, 173 (1923); H. G. Brown, "Railroad Valuation and Rate Regulation," 33 *Journal of Political Economy*, 505 (1925), and "Rate Base for Railroad and Utility Regulation" 34 *ibid.*, 479 (1926); and W. J. Graham, *Public Utility Valuation* (Chicago, 1934).

¹⁶ See M. G. de Chazeau, "The Nature of the 'Rate Base' in the Regulation of Public Utilities," 51 *Quarterly Journal of Economics*, 208 (1937), and *Government and Economic Life*, vol. 2, pp. 684 ff.

A survey of Wisconsin commission opinions on rate valuation and rate of return indicates that while the commission has no misgivings about the use of original cost on the score of economics, its employment of original cost is grounded positively in considerations of administrative expediency rather than in elaborate economic analysis. The commission is certainly aware that both fairness to utility investors and the need of evoking sufficient service dictate the fixing of rates which will produce returns comparable to those which may be had in similar unregulated industries. However, nothing in its expressed opinions suggests that the commission has ever felt that the reproduction cost-original cost controversy has any significant bearing on the problem. Nor has the commission ever announced any exact measure of "sufficient service" or "enough investment." It may be assumed that the commission is concerned with allowing rates high enough to evoke as much utility investment as it deems desirable from a competitive capital market; and it is clear that, if legally possible, it would prefer to use a rate-making standard and method that would permit rapid, noncontroversial, and economical adjustment of utility prices to newly developed and changing conditions. There is no reason, however, to believe that the commission has more than a casual academic interest in those refinements of rate valuation theory which deal with the synchronization of rates based on "fair return on fair value" with the prices evolved in other markets.¹⁷ This is not to suggest that the commission is at fault; there is plenty of reason to believe that economics is an uncertain guide at this point.

In "emergency" or "temporary" cases (of which more will be said later) the commission has employed both "value of service" and "return on securities" as its criterion of a fair level of rates.¹⁸ In the matter of deductions to reflect property depreciation, the Wisconsin commission has gone further than any other commission in the country in the development and explicit statement of its position.¹⁹ It has long sought, both in rate cases and accounting regulations, to harmonize annual depreciation allowances with depreciation deductions from "cost new" in the determination of "fair value"; and it has consistently advocated and has employed the depreciation-reserve balance as the measure of deductible accrued depreciation, wherever annual depreciation rates and reserve accounting in the past have been sufficiently sound to permit such action.²⁰

Allowances in the rate base for "going value" have presented a difficult problem to the commission, principally because of its desire to avoid entanglement with the courts. Left to its own policies, however, the commission in recent years has regularly ruled that no separate figure representing going value should be named, and has,

¹⁷ As will be developed later, the commission has been more active than most of its contemporaries in the matter of moving the level of utility rates in accord with general price movements, at least during the cyclical downswing. But this does not bear on the question of the relationship between the level of utility rates and the level of general prices at any given stage of the business cycle.

¹⁸ See 2 *Wisc. F. S. C.* 106, 108, 239 (1932); 4 *ibid.*, 431, 433 (1933); 5 *ibid.*, 1, 30 ff. (1933); and 3 *ibid.*, 366, 369 (1933).

¹⁹ See the report, *Depreciation, A Review of Legal and Accounting Problems*, submitted by the Wisconsin commission to the National Association of Railroad and Utilities Commissioners (New York, 1933).

²⁰ See 3 *Wisc. F. S. C.* 63, 77 (1932); 4 *ibid.*, 160, 176, (1933); 4 *ibid.*, 591, 604 (1933); 7 *ibid.*, 1, 3 (1934); 12 *ibid.*, 277, 285 (1936); and 15 *ibid.*, 316, 318 (1937).

The reader will understand that in valuation for rate making the property is being valued in its "present condition"; that rates have been calculated to cover annual depreciation as an operating expense, and thus to reimburse the owners for capital used up in operation, and hence, that a figure representing the existing depreciation (whether due to physical or functional causes) is properly to be deducted from "cost new" to arrive at a rate base.

thus, made a very real contribution toward the elimination of one of the most persistent methods of rate base inflations.²¹

The commission's policy with reference to allowable operating expenses is well illustrated by its action in the Wisconsin Telephone case in which it called into question items of maintenance, depreciation, relief and pensions, costs of rate litigation, services of parent company, and income tax, on the grounds that "it is elementary that the expenses of a public utility, from the standpoint of rate regulation, must be reasonable."²² The commission did not spell out its standard of operating efficiency in explicit terms, but the suggestion is conveyed, nonetheless, that utilities are entitled to recover only such operating expenses as would be incurred if vigorous competition were present.²³

The commission's opinion in the same case contains a full statement of the position it has consistently maintained with reference to the determination of "fair rate of return." The commission summarized the applicable principles as follows:

- (1) A fair return is a flexible concept, not a static, unchanging rule.
- (2) What return is "fair" calls for the exercise of judgment in the light of the particular circumstances of each case.
- (3) Present-day conditions are controlling.
- (4) General conditions affecting all business should be given consideration in the application of each of the measures of "fairness."
- (5) To be fair, the return should equal the returns earned at the time of the rate order by other business enterprises with comparable risks, in the same part of the country.
- (6) The utility's needs for new capital should be considered, since the return should be such as, under present-day conditions, will enable it to raise whatever capital it requires.
- (7) The return should be such as will maintain the credit of the utility, in the light of presently existing business conditions and opportunities for capital in other enterprises.²⁴

Consideration was given to the company's structure in the final report in this case, as in an earlier report and in other cases,²⁵ but here as elsewhere it is impossible finally to identify the effect of the consideration. The commission has never defined the phrase "maintain the credit of the utility" with exactness. The fullest discussion occurs in the first report in the *State-Wide Telephone case*²⁶ in 1932, but

²¹ See 12 Wisc. P. S. C. 277, 289 (1936); and 7 *ibid.*, 27, 48 (1934). And see B. W. Lewis, "Going Value and Rate Valuation," 26 Michigan Law Review, 713 (1929).

²² 12 Wisc. P. S. C. 1, 21-74 (1936), repeating 2 Wisc. P. S. C. 106, 253 (1932).

²³ "During years of depression, when competitive industries are bending every effort to reduce costs and market services and commodities at prices commensurate with reduced purchasing power, this company takes the position that rates cannot be reduced. It depends on justifying its rates on the basis of company-controlled expenditures, and relies on the fact that no other more enterprising concern can take over its market by finding a way to reduce costs and the charges for service. In fact, during the period of retrenchment in other industries, the company's unit cost of maintenance labor increased by more than 25 percent." (*Ibid.*, p. 23.) The commission was unwilling to measure normal maintenance requirements for the future by reference to maintenance-labor expenses for the years just past when an abnormal plant staff of highly paid, long-time employees was retained after a substantial reduction in the total force. However, "It goes without saying that we are not criticizing the company for the amount of wages paid to any employee nor do we desire to leave the impression that this amount is one penny more than it should be." (*Ibid.*, p. 30.) As a matter of fact, although the specific issue has not arisen for determination, there is every reason to believe that the commission would willingly recognize high (or increased) wages which were likely to be paid in fact in a high (or increased) operating expense allowance and, correspondingly, in high (or increased) rates. The writer has reason to believe that in at least one rate negotiation involving a major company, the commission virtually required the payment of increased wages to certain underpaid employees.

²⁴ *Ibid.*, pp. 140 ff. The commission gave detailed consideration to elaborate and searching exhibits relating to current trends in costs of capital, and found that 5½ percent was a fair return on the reproduction cost rate base.

²⁵ *Ibid.*, pp. 145 ff.; 6 Wisc. P. S. C., 315, 396 ff. (1934); and *Re Barron County Telephone Co.*, 4 Wisc. P. S. C. 160, 186 ff. (1933). In all of these instances the commission was particularly concerned about the relationship between capital structure, income tax, operating expenses and rate of return, rather than about the more general bearing of capital structure on rate of return and credit stability. The matter of an ideal or standard capital structure for a public utility, and any question of the effect on the allowable rate of return of any deviation of the actual capital structure from the ideal, were not discussed in any written opinions, however much the commission may have taken them into account, in fact.

²⁶ 2 Wisc. P. S. C. 106, 265.

whether "to maintain credit" means the ability to sell securities at par, or at all, or on particular relative yield expectancies, is not disclosed. Since the company's needs for capital were found to be negligible, while its earnings placed it in a position "far above that of the other competitors for capital and credit," the commission felt no need, apparently, to be precise in its analysis.

THE RATE STRUCTURE

The Wisconsin commission has been actively concerned with the pattern of electric rates. In a series of recent decisions it has sought the establishment of a uniform type of domestic rate form for the entire State.²⁷ Both the form and the substantive pattern of electric rates in Wisconsin are made to reflect a combination of cost and demand considerations. The commission has adopted the fixed "customer charge" rate form for residential and small commercial users, contending that customer charge, at least, can be isolated and should be covered by each user, and that a fixed charge followed by low "follow-on" rates will conduce to a more extensive use of facilities.²⁸ Large power users, the cost of whose maximum demands for power (which the utilities stand in readiness to serve) can be measured, and required to pay for electricity under "demand-energy" schedules; that is, a fixed "demand charge" according to the size of maximum demand and a charge for energy depending on the amount taken.²⁹ The commission has reacted strongly against "load-count" and "room-count" rates for domestic service, however, arguing that they are inaccurate measures of cost, discriminating in practice, difficult to administer, irritating to customers, and that they militate against full use of facilities.³⁰ Indeed, upon occasion, the commission has favored the "minimum bill" type of rate because of its promotional effect.

The commission's interest in promoting full use of electric facilities has manifested itself both in its constant and continuing adjustment

²⁷ See 1934-36 Biennial Report of the Public Service Commission of Wisconsin, pp. 17-18.

²⁸ See 5 Wis. P. S. C. 1, 10 (1933); 8 *ibid.*, 108, 111 (1934); and 15 *ibid.*, 660, 664 (1937). In the last of these cases, the commission said, on pp. 664-665:

"The fixed-charge type of rate has been installed in over 90 percent of Wisconsin's cities and villages, and has therefore become a largely standard type of rate for residential- and commercial-lighting service in Wisconsin."

"The commission recognizes the fact that in rendering electric service there are certain costs which vary but little among customers of a given class, and have little or no relationship to the amount of energy consumed. When these costs incidental to the maintenance of the utility's investment on the customer's premises are segregated and paid for by the fixed charge, the energy consumed, the cost of which varies with the customer's use of electricity, can be quoted at a much lower rate per kilowatt-hour. Accordingly, this rate makes it possible for the customer to make an increased use of his electrical equipment at a lower additional cost."

"The standard fixed charge adopted in most commission rate investigations is 90 cents net for residential service and 75 cents net for commercial service. This charge is designed to cover maintenance, taxes, depreciation, and return on the utility's investment on the customer's premises, and costs of meter reading, testing, billing, collecting, and customer accounting."

²⁹ 10 Wis. P. S. C. 265, 273 (1935); and 10 *ibid.*, 341, 348 (1935). In the former case the commission said, on p. 273:

"It is generally accepted that utility rate schedules should apportion the total reasonable cost of service among the several classes of service and individual customers in each class as equitably as is practicable, in order to avoid discrimination."

"Applying this general principle to the facts in this case, it is reasonable that power customers who place a substantial demand on the utility system and require a large portion of the capacity of the plant and equipment should bear their fair share of the fixed charges on the additional plant and equipment they require, in addition to the cost of energy used."

"The proposed large-power rate, therefore, is a demand and energy rate under which the customer's bill is based both on the maximum demand he places on the system and the amount of energy he uses."

³⁰ See 16 Wis. P. S. C. 1, 3 (1937); and 16 *ibid.*, 266, 275 (1937). Rates of this type provide for a demand charge base upon the number of rooms, or the number of electric outlets or appliances.

of rate levels to the lowest point consistent with necessary revenues³¹ (discussed above), and in its orders requiring electric utilities to institute so-called "objective" rates, according to which a customer may buy at a lower rate energy beyond the amount of his consumption in a previous period. Such rates are designed to make increased use attractive to consumers and, at the same time, to protect the utilities in their previous legitimate earnings.³² A major purpose of objective rates is to break the log jam arising from customers' refusal to increase their use unless rates are reduced, and utilities' refusal to reduce rates unless use increases. At the same time, it must be noted that in calculating rates the commission bases its estimates upon past consumption at higher rates.³³ This practice is followed despite the commission's awareness that during the whole period of the thirties electric rate reductions have been followed so swiftly and completely by increased consumption that revenues, although diminished at first, have been recovered almost overnight.³⁴ Unwillingness to allow for "elasticity of demand" has been due to lack of factual data, realization that demand elasticity is only one of many "unpredictables," and the belief that the courts would be reluctant to accept even the best estimates which the commission's staff could furnish. The commission has chosen to meet the problem by the process of frequent rate adjustments rather than by attempts at exact prediction of the probable reaction of demand to price reductions.³⁵

The substantive pattern of rates—the rates which one group, for example, residential users, is required to pay in relation to rates which other groups, for example, commercial and industrial users, are charged—is determined very largely by the trial-and-error "judgment" process. Out-of-pocket costs, and fixed costs to the extent that they are ascertainable, are borne in mind. For instance, it is accepted that commercial users in the main involve greater costs than residential users because their demand is almost entirely "on peak."³⁶ On the

³¹ The commission has estimated that electric rate reductions from June 8, 1931, to October 21, 1936, resulted in reduction in electric utility annual revenues of \$4,686,589, benefiting 1,019,913 customers. See 1934-36 Biennial Report, p. 35. The most recent estimate places the amount of electric revenue lost from April 1, 1931, to the end of 1939 at \$7,718,162.

Reductions from July 1, 1936, to June 30, 1938, were estimated at \$2,286,236, benefiting 553,085 customers. See 1936-38 Biennial Report, p. 17.

The amount of revenue reduction resulting from reduced rates is calculated by applying the new reduced rates to the amount of service taken at the old rates. Since the new rates are likely to stimulate new consumption, it does not follow that the utility's operating revenues will actually fall in the ensuing period.

³² See 9 Wis. P. S. C. 25 (1935); 10 *ibid.*, 36 (1935); and 1934-36 Biennial Report, p. 18.

³³ "In 1935 the commission initiated as an experiment what has come to be known as the 'objective rate plan.' Under this plan a lower rate schedule was established toward which eligible customers might progress by means of a 'cross-over' rate applied to increased kilowatt-hours used above the corresponding month of the previous year. When the objective rate was reached, that rate schedule was applied. Under this plan some immediate rate reductions were made for larger users of energy; additional monthly reductions, compared with the standard rates, were made during operation of the plan, to those eligible customers whose use of electricity increased; and a third rate reduction comes with application of the objective rate to all customers who would benefit thereby. This third reduction is in process of negotiation in connection with consideration of the future status of the experiment or a modification of it, although some utilities have already placed the objective rates in effect. The aim of this plan was to quicken a general lowering of rate levels for residential and commercial users by affording an opportunity for more abundant use at lower rates.

"We believe that Wisconsin was the first State in which the commission required the experiment on practically a State-wide basis involving the several major as well as smaller utilities."

³⁴ This is the commission's standard practice. But see 5 Wis. P. S. C. 1, 31-32 (1933).

³⁵ See, e. g., 1934-36 Biennial Report, p. 19: "The latest available summary covering the first 9 months of 1936 for 10 of the larger gas and electric utilities indicates that operating revenues and operating income have increased 6.4 and 12.6 percent respectively over the corresponding 9-month period of 1935. This improvement has occurred despite rate reductions."

³⁶ In the 1934-36 biennium, the rates, engineering and accounting departments of the utilities division cooperated in 429 formal rate investigations, and it was estimated that in the same period 819 utility rate reductions were negotiated informally. *Ibid.*, p. 17.

³⁷ This is an "accepted" conclusion in commission circles. See 5 Wis. P. S. C. 1, 22 (1933).

other hand, industrial users very frequently enjoy competitive sources of supply (at least potentially) and hence the task of the commission frequently is to force the utility to charge "enough" for industrial power. The commission is realistic in its unwillingness either to depend or to appear to depend upon detailed, arbitrary cost allocations in spreading the burden of rates. Ascertainable, incremental costs of each class of service are covered by the rates charged users within each group, and other common costs are spread very largely on a "value of service" basis. The effect on consumption is carefully watched in each case; features of rate schedules which are "out of line" with the "customary" pattern are corrected and brought back "into balance" at the earliest opportunity. To no slight extent the commission takes into account the volume of protests against the previous schedule ("which group has felt itself the most offended against?") in determining which groups are to be granted the greatest benefit in pending reductions. In the main, it may be said that the commission has explored the possibilities of cost bases for group rates as far as existing information and knowledge will permit, and from this point of departure has guided its inquiries and its final price decisions principally in the direction of extended service and greatest use of facilities. It is fair to say, although documentary proof is lacking, that the commission is consciously and actively directing its efforts to the continuous readjustment of rate levels and schedules to achieve increased use consistent with payment by each class of consumers of short-run incremental cost and payment by all classes of total costs. The facts that the commission's opinions are not couched in these terms and that tests of achievement are not available, do not militate against the validity of this conclusion.

ADJUSTMENT TO CYCLICAL PRICE LEVEL

The commission's efforts to adapt utility rates to the cyclical fluctuations of prices, employment, and earnings of business and industry in general may be studied in greatest detail in connection with the *State-Wide Telephone case*: A series of three temporary orders, followed by a final order, five years after the opening of the case; all of which were nullified by court decisions culminating in the order by the Wisconsin Supreme Court in July 1939, invalidating the commission's rulings from start to finish.³⁷ In the hearings preceding, and in the decision and opinion rendered in the first of the temporary orders, the commission made its pioneering contribution. After finding that the company's probable earnings following the reduction would be more than sufficient to pay operating expenses, fixed charges, preferred-stock dividends, and 6 percent common-stock dividends, the commission ordered a temporary reduction in local telephone rates of 12½ percent, involving a decrease in revenues of \$1,566,450, based on 1931 business. The reduction, in itself, was not peculiar, but the action was substantially influenced by and to some extent was based upon testimony relating to the prevailing depression, submitted, at the request of the commission, by several departments of the State government and by a group of nationally known economists. In this respect the commission's procedure was novel in the extreme.

³⁷ 2 Wis. P. S. C. 106 (1932); 4 *ibid.*, 201 (1933); 6 *ibid.*, 315 (1934); 12 *ibid.*, 1 (1936); and *Wisconsin Telephone Co. v. P. S. C. of Wisconsin* (287 N. W. 122 (1939)). The decision and opinion of the court were devastating in their sweep, cutting down the commission's economic approach, its procedure, and most of its important substantive rulings. An appeal from the State supreme court to the United States Supreme Court was sought, and, on grounds unrelated to the substantive merits of the commission's order, denied.

The evidence relating to prevailing economic conditions in Wisconsin portrayed the effect of the current business depression upon labor, agriculture, corporate business, financial institutions and utilities, and personal incomes. It disclosed that the number of employees on factory pay rolls had declined steadily from 1929 to March 1932 and that in the latter month it was from one-fourth to one-third less than in 1929. In March 1932, weekly pay rolls of reporting manufacturing firms were 48.5 percent of the level of wage disbursements in 1925 to 1927 inclusive, and from March 1930 to March 1932, the decline of pay rolls was 48 percent. The number of hours worked declined from 51.8 hours per week in September 1928 to 39.7 hours per week in November 1931. Figures on outdoor poor relief showed local governmental expenditures totaling \$1,236,837 in 1928 and \$8,010,215 in 1932. The commission concluded that wage earners in Wisconsin had undergone a loss of employment and a loss of income greater in amount and duration than in the major depression of 1920-21.

Gross farm income of the State was shown to have declined 44 percent in 2 years; the price index of 30 Wisconsin farm products had declined 28 percent during the year ending February 1932 (54 percent below the 1929 level), reaching the lowest point since 1910; the average price of milk was the lowest since 1901; and, since the prices paid by farmers for commodities bought were still over 20 percent above pre-war levels, the Commission concluded that the average farmer as a businessman was in the most serious plight of this century.

In 1929 Wisconsin manufacturing corporations reported aggregate taxable incomes less loss of \$109,631,400; in 1931 the losses exceeded the incomes by an estimated \$29,018,100; and the situation was even worse in the case of retail trade corporations. Disbursements of salaries and wages had declined materially. While the annual number of commercial failures had remained almost constant for the preceding years, the total liabilities involved had risen over 60 percent. Bank suspensions (together with the amount of deposits involved) had increased many-fold, and data submitted by the Wisconsin Insurance Department showed a sharp increase in policy loans. Evidence indicated that the 1932 normal income tax assessment for Wisconsin would be approximately 25 percent less than the assessment for 1931, 34 percent less than for 1930, and 33 percent less than for 1929.

On the other hand, statistics covering Wisconsin class A and B utilities showed that the total operating revenue of electric, gas, telephone, water, and electric railway and bus utilities reached its highest 4-year point in 1930 and declined by less than 4 percent in 1931. Electric utilities showed a slight increase in operating income in 1931 compared with 1930. While the dividend rates of these utilities, including those which paid no dividend, declined in 1931 compared with 1928, they were still able in 1931 to pay on the average 8 percent dividends, equivalent to more than 6 percent on average common stock equity, and to add \$1,500,000 to surplus. The commission concluded that the effects of the depression on the larger Wisconsin utilities had been slight compared with the effects on all other economic groups in the State.

Economists testifying on the general economic situation included Dr. F. C. Mills (Columbia), Dr. E. R. A. Seligman (Columbia), Dr. F. A. Fetter (Princeton), Dr. Jacob Viner, (Chicago), Dr. W. A. Paton (Michigan), and Dr. J. C. Bonbright (Columbia). The testimony

introduced by these witnesses relating to the course of prices and economic activity indicated, of course, subnormal levels with respect to both items. Industrial production was shown to have declined sharply, and unemployment relief expenditures had increased in startling measure. The "resistance to price adjustment" was shown to have been stouter than in earlier depressions, representing the existence of forces deferring price adjustment and widening price differentials. A mass of evidence bearing on the matter of price disparities was introduced, designed to show that the price structure of 1929 which had been built up over a period of years had been torn open by the price revolution since 1929.

The economists were in substantial agreement that the unevenness of price adjustments was a major factor prolonging and intensifying the depression.

The effects of relatively rapid and uneven price changes upon the volume of business come about through the effects of these changes upon the so-called profit margins of producers and upon the expenditures of consumers. The present situation was described as having such wide variations in prices that the margins for profit are either nonexistent or so small that businessmen feel impelled to curtail or cease their activities. With the lengthening of the depression, consumers' spendable funds have become so reduced by unemployment and fallen incomes that there is a marked deficiency in the demand for goods and services which might operate as a stimulus to a recovery in business.

The unusually wide discrepancy between the prices of different commodities and services in the present depression was attributed largely to the fact that the number of rigid prices was much larger in the present depression than in previous depressions. It was stated that if the price of some commodity in common use remains rigid when all other prices have been drastically cut and if the incomes of consumers have likewise been severely curtailed, then a larger proportion of the available spending power is used for those commodities whose prices have not changed. This, at the same time, lessens the proportion of the spending power available for those commodities and services which have been cut in price. This situation causes cumulative damage in a time of depression for it accentuates the effects of depression upon freely-priced commodities and services.³⁸

Utility prices were shown to have been extremely rigid. Wisconsin telephone rates, indeed, had increased steadily since 1917; any movement in these rates since the beginning of the depression had taken them to levels even above those of 1929. The commission examined evidence bearing on the comparative earnings of utilities and unregulated industries during periods of prosperity and concluded that serious doubt was thrown upon the assumption that utilities do not enjoy large returns in prosperous times. The evidence was clear that regulated utilities in Wisconsin received generous rates of return in prosperity, comparing favorably with the returns received by successful unregulated corporations, and that in times of depression, utilities fared much better than other corporations.³⁹

The commission concluded that—

The existence of an economic crisis which has paralyzed business and impoverished individuals, is relevant in this proceeding in the following respects: (1) It constitutes an added reason for putting into effect an interlocutory temporary order without waiting upon the final results of the investigation; (2) it

³⁸ 2 P. S. C. W. 106, 227-228 (1932).

³⁹ Answering the company's contention that "since utility companies were not permitted to share in the feast, they should not now be compelled to share in the famine," the commission pointed to testimony derived from Federal income tax returns indicating that rates of return on net worth for all corporations were from 2.8 percent in 1930 to 7.0 percent in 1926, whereas corresponding figures for transportation and public utility companies were 4.5 percent (1930) and 7.3 percent (1926). In 1928 the average rate of return on common stock equity of four large, prosperous Wisconsin utilities was 10.6 percent, whereas successful unregulated Wisconsin corporations earned 13.1 percent in 1928. The commission recognized the limitations of these and other data—all pointing in the same direction—but accepted them as the best available, and as casting "serious doubt" on the company's claim (*Ibid.*, pp. 232 ff.).

constitutes authority for a summary procedure under the *LaCross case*, *supra*; (3) it affects and measures the value of service rendered by the company, one of the essential factors in determining the reasonableness of rates; (4) it establishes the great increase in the purchasing power of the subscriber's dollar and of the dollar which the company pays its parent corporation in dividends; (5) it affects the reasonableness of the return to which the company is entitled.⁴⁰

It will be seen that in this most elaborate attempt by any regulatory commission during depression years to adjust utility rates in response to cyclical factors, no elaborate theory of rates in depression and recovery was advanced, nor was there any effort at an exact synchronization of utility prices with prices in general. Certainly no attempt was made to manipulate utility rates so as to achieve any consciously sought flow of purchasing power from hoarding into spending hands and thus to contribute to economic recovery and a fuller use of resources generally throughout the economy.⁴¹

The Wisconsin Commission permitted the existence of a general depression to influence its rate policy only in the matters of (1) expediting procedure, (2) reducing rates to reflect the lowered "value of service" (thus conducing to fuller use of existing facilities), and (3) adopting a lower rate of return in the calculation of fair earnings. Its philosophy of utility rates and the business cycle was the simple conviction that utility rates should move in the same direction as prices in general during major downswings in cyclical activity. This interpretation is reinforced by a survey of electric rate cases during the entire period of the thirties; despite upward movements in business and prices, there have been no electric rate increases (other than "technical," for certain groups within a schedule) during the decade. The commission's opinions contain frequent references to "value of service" and "rate of return" as affected by depressed business activity; but there was no discussion of factors affecting depression and recovery, such as elasticity of demand, cash balances, short-term loans, notes payable, and the like—the stuff of which cycle theory is made. The commission's research staff, although unusually active and prolific in issuing reports and charts, has done no work along this line, and members of the rate department explicitly disavow, in private conversation, any attempt to fit utility rates to any pattern of the business cycle more elaborate or involved than that of the *State-wide Telephone case*.

⁴⁰ 2 P. S. C. W. 163, 156 (1932).

⁴¹ J. D. Sumner, "Public Utility Prices and the Business Cycle," 21 *Review of Economic Statistics*, 97 (1939). In view of the cold reception given by the Wisconsin supreme court to notions about the business cycle as simple as those advanced by the commission, it does not appear probable that a rate ruling based on a more elaborate set of ideas would be worth attempting. It does not require an active imagination to foresee the effect upon the Wisconsin court of a rate order constructed out of such ingredients as Sumner suggests, if, with reference to the commission's innocuous ideas in the *State-wide Telephone case*, it could say:

"Nor do we find that the statute confers upon the commission any power to relieve the economic condition of consumers by taking property away from the utility and awarding it to its patrons. What the statute authorizes the commission to do after it has found that existing rates are unjust and unreasonable is to establish a just and reasonable rate which has been defined over and over again. If the commission were empowered to review the whole internal economy of the State, its postulates and arguments might sustain the conclusion that it reached. Within the limits of its statutory authority, however, it had no right to give dominant weight to economic theory in the face of the statutory command. Recent years seem to have pretty thoroughly demonstrated that economic theory is vague, uncertain, and undependable and that predictions based upon it are not reliable. It seems to be in constant need of repair and readjustment."

APPENDIX TO CHAPTER I

TYPICAL LETTER FROM THE WISCONSIN COMMISSION TO AN ELECTRIC UTILITY, INSTITUTING RATE REDUCTION NEGOTIATIONS

DEAR SIR: A preliminary analysis of your 1938 report indicates that your electric utility had a net operating income of \$21,646 in 1938. This was equivalent to a 13.19% return on the 1938 rate base of \$164,053 determined by deducting the depreciation reserve from the cost of fixed capital and adding allowances for working capital and materials and supplies. Your 1938 operating income was \$11,803 in excess of a 6% return. It appears desirable, therefore, for you to consider a reduction in your rates at this time.

We understand that your utility is now carrying out an extensive construction program. Your letter of March 27 regarding this construction program indicates the contracts totaling \$48,580 have already been let for this program, that these and certain other improvements will probably be completed during 1939, and that the cost of these improvements can be financed out of available utility funds "without depending on more than a 6% return in 1939." Our preliminary examination of your utility's financial report for 1938 verifies the fact that you will be able to finance this program out of your present utility funds.

Your present construction program will greatly increase the utility's total cost of fixed capital. For purposes of determining new rates, therefore, we feel it will be reasonable to increase your rate base approximately \$50,000 to reflect the proposed improvements.

In 1938 we proposed that lower commercial lighting, and commercial power rates be adopted to eliminate the excess return of \$3,278 earned by the utility in 1937. That reduction was postponed at your request in view of your contemplated construction program.

Consideration of your excess return of \$11,803 for 1938 indicates that a reduction in your commercial lighting and commercial power rates should be made at this time and should be supplemented by reductions in your residential, water pumping and pumping sewage rates. We are accordingly submitting for your consideration the enclosed residential, commercial lighting, commercial power, water pumping, and pumping sewage rates.

The proposed commercial lighting rates are identical to those suggested in 1938. The proposed commercial power rates are similar to those proposed in 1938 but go one step farther in simplifying the power rate by providing identical blocks for regular and off-peak power service. The proposed reduction in the second block of the residential rate from 2.25¢ to 2.0¢ per kilowatt-hour will bring that rate in balance with the commercial and power rates and should stimulate consumption by your residential customers. We estimate that the reduction

to your customers resulting from adoption of these three proposed schedules would be as follows:

Residential.....	\$1, 170
Commercial.....	2, 859
Commercial power.....	1, 044
Total.....	5, 073

In reviewing your rate files, we noted that your present water pumping rate of 3¢ per kilowatt-hour, and your present sewage pumping rate of 4¢ per kilowatt-hour, have not been changed since July, 1928. These rates appear out of line with your rates for power service to large commercial and industrial customers. It appears reasonable to provide these services to the water utility and the city on rates identical to the commercial power rate. The estimated reduction from billing these services on the commercial power rates would be:

Water pumping.....	\$1, 674
Pumping sewage.....	1, 935
Total.....	3, 609

It is estimated that the total reduction in the utility's revenues due to adoption of the proposed rate changes would be \$8,682.

We would appreciate receiving your comments regarding the proposed rate reductions.

Very truly yours,

CHAPTER II

THE ILLINOIS COMMERCE COMMISSION

The Illinois Commerce Commission operates under a modern regulatory statute, thoroughly renovated in 1933 and revised again in 1935. The commission has authority, with reference to the usual range of public utilities, to proceed in rate matters either on complaint or on its own motion,¹ to fix temporary rates pending a final determination;² and, to facilitate and make effective its control over rates, it has extensive powers over accounts and depreciation,³ and securities, financial practices, and intercorporate relations.⁴ As bearing particularly upon the subject of this report it may be noted that the commission's organization includes separate departments of investigation, research, rates and tariffs, and engineering. Its annual expenditures are in the neighborhood of \$500,000.⁵

Upon its reorganization in 1933, the commission undertook to discharge its function as "an aggressive, investigating, fact-finding body";⁶ and there can be no doubt that it has attained a place well up on the list of effective regulatory agencies.

The character of the commission's activity is suggested by its actions taken on its own motion, by the interest it has displayed in rate structures and patterns, by the support which it has given to the cause of rural electrification, by its resort to frequent and rapid negotiation instead of extended formal proceedings, and, finally, by the very considerable reductions in electric rates which it has been able to report. Each of these matters will be considered in its appropriate place in the sections that follow.

THE LEVEL OF RATES

In its official pronouncements, the Illinois commission is an unregenerate "fair value" commission; i. e., it purports to relate the level of utility rates to a fair return on a value base determined by giving "due consideration and proper weight" to all relevant elements and factors. Probably the clearest statement of its formal position is to be found in the final report in a proceeding brought by the commission on its own motion against the Public Service Company of Northern Illinois.⁷ After noting that it was tempted to give dominant weight to original cost,⁸ despite the company's contention that consideration should be given only to reproduction cost, the commission concluded:

As between the figures submitted by witnesses for the company, approximating \$150,000,000, and exhibits showing original cost and reproduction cost obtained

¹ Illinois Public Utilities Act, par. 41, 84.

² *Ibid.*, par. 36.

³ *Ibid.*, Article II.

⁴ *Ibid.*, Article III.

⁵ 18 Annual Report, p. 81.

⁶ 17 Annual Report, p. 1.

⁷ Docket No. 22353, decided May 2, 1934.

⁸ "the original cost has been established in a formal rate case at a comparatively recent date (1923) (2) the books and records of the company since that date have been under the supervision of this commission, (3) the greatest growth and development of the property has taken place since that date, and (4) a high level of prices for materials and labor has obtained over the greater part of the period since that date, and particularly over that part of the period during which the bulk of the company's property was constructed." (*Ibid.*, pp. 59-60).

by the use of national indexes, submitted by commission witnesses, approximating \$120,000,000 to \$122,000,000, respectively, the commission is satisfied that the figures submitted by its witnesses more nearly approximate the fair value of the company's property than do the figures submitted by witnesses for the company. In any event the commission is convinced that the fair value of the company's property used and useful in its electric utility operations, including the leased property in Chicago, and including working capital, materials and supplies and all intangible elements of value such as going concern value, is not in excess of \$134,500,000, which sum is adopted as the rate base in this order.⁹

In most of its proceedings the commission has not found it necessary to commit itself definitely on the composition of "fair value," since it has been able to negotiate rate reductions without formal action;¹⁰ and it is to be noted that even in the *Public Service Company* case the value finding was couched in the ambiguous phrase "not in excess of * * *." Where, as in the *Public Service Company* case, the commission has proffered a full discussion, it is apparent that practically all of the constituent items or considerations which the commission finally merges into a final single-sum value figure by the exercise of reasonable judgment are, themselves, not measured by the commission in identifiable terms. Thus, reproduction cost is presented both as determined by an engineering appraisal made under certain assumptions as to conditions and prices, and as estimated by the application of price indexes to earlier valuations; accrued depreciation appears to be judged by a consideration of the observed condition of the plant, life tables, the depreciation reserve, and the claimed allowance for annual depreciation; and going value is declared to be an element of value to which the commission must accord due weight, and yet, with reference to which the commission regularly rejects every proffered proof of exact measurement—and, just as regularly leaves enough margin in its over-all finding to forestall any claim, upon review, that going value has not been considered.¹¹

Indeed, it is difficult to escape the impression that the commission's valuation activities are designed to serve only as a general guide to its rate level orders, and that such formal and detailed reports as it offers are designed very largely to indicate the conformity of the commission's processes to the standards laid down by the courts. It is certainly true that the commission embraces no doctrine of valuation which seeks the synchronization of regulated with competitive prices and the exactly correct allocation of economic resources into and within the utility field through the employment of a value base for utility prices appropriate thereto. With reference to valuation and

⁹ *Ibid.*, p. 64. And note the following calculations from *In re Peoples Gas Light & Coke Co.* Docket No. 24792, decided May 21, 1937, and now in litigation:

Reproduction cost new of property excluding land, including overheads, as of Jan. 1, 1936	\$127,860,677
Add 8 percent to reflect price levels of Mar. 15, 1937	138,099,251
Original cost of property, excluding land	109,750,000
Fair value of land	4,732,822
Commission finding of property value before depreciation, not more than	135,000,000
Property in 78 percent condition	105,300,000
Working capital, materials and supplies	7,500,000
Fair value for rate making	120,000,000

¹⁰ In the *Commonwealth Edison* case (cited and discussed below), after an exhausting array of witnesses and exhibits, the commission negotiated a settlement without benefit of exact findings on "fair value."

¹¹ The arguments of the commission rejecting specific claims made for going value in the *Public Service Company* case are among the most effective that have come to the writer's attention.

rate of return,¹² the commission's opinions evince no interest in the mechanics, merits or import of controversies on matters of rate principle which have so greatly occupied writers on this subject in recent years. Its inclination toward original cost seems to be grounded as much on its belief that an original cost rate base is "fair" in light of recent trends of costs, prices, and earnings generally, as on consideration of speed and economy.¹³ The commission is fully aware that prospective earnings must be such that "enough" capital will be drawn into the utility field, and that rates must be established accordingly. But its measure of "enough," like its measures of value, and of each of the items entering into value, is a product solely of "judgment" in each proceeding rather than application of announced definite standards.

In setting rates the commission has followed the orthodox procedure of adjusting various rates within the total schedules so that if future consumption at the new prices is equal to consumption at the old prices the utility will receive the requisite total income as determined by the operating expense-fair return on fair value formula. No explicit allowance is made in rate calculations for "elasticity of demand," although the commission is well aware of the phenomenon and, indeed, has hinted at it as an added factor of safety in certain determinations.¹⁴ In this connection the commission has had doubts as to the willingness of courts to permit any departure from "present facts" in rate calculations.

Despite its apparent lack of concern for considerations which it probably believes to be too remote to be either practical or permissible under existing legal doctrine, the commission has certainly conducted an active campaign on its own initiative in recent years for electric power rate reductions. In April 1933¹⁵ the commission cited the 27 major electric companies of the State to show cause why their rates

¹² The commission's discussion of rate of return in the *Public Service Company* and *Peoples Gas Light & Coke Company* cases (cited above), on pages 80-87 and 120-129, respectively, was extremely thorough and pointed; otherwise its formal attention to this item has been slight. In these two cases its allowances ("not more than 6.3 percent" in the first, and 5.95 percent in the latter) were reached after consideration of cost of capital, past earnings, degree of market development, present money market conditions, company's risk position, and company's capital structure and financial history. Just how the figures expressing these considerations were developed into precise rate of return findings is, of course, not clear. It is significant, perhaps, that the finding in the *Peoples Gas* case was that existing rates which produced a return of 5.95 percent were fair, and, hence, that the company's proposed schedule of increases should be rejected.

That the commission is alert in the control both of the character and amount of operating expenses to be allowed in calculating rates is evidenced by its action in rejecting company claims of \$460,217 in the *Public Service Company* case and \$1,784,785 in the *Peoples Gas* case. The claims and rejections, for the most part, were not related in any way to standards of operating efficiency.

¹³ This is suggested by the fact that in formal cases full attention is still given to elaborate, expensive, and time consuming presentations of evidence on reproduction cost. It is true that the commission feels required by law to give full consideration to reproduction cost, but it is also true that its critical comments are directed primarily to the substantive merits of the method.

It is probably correct to say that the commission's staff is more sympathetic to an original cost than a reproduction cost value base, principally on grounds of expediency. There is no evidence that the staff, any more than the commission itself, has pressed its formal analysis of valuation beyond the point of recognizing that rate value, rate of return, and resulting rates for service must be "fair" in relation to earning possibilities in the competitive field in order to attract "enough" capital into the utilities industries.

¹⁴ Thus: "Furthermore, the witness failed to recognize that . . . lowered rates designed to produce a return of 6.3 percent under present conditions will show a greater return under the increased use of the service." *Public Service Company* case, cited above, p. 83.

The commission's advocacy of objective rate plans, discussed below, is further evidence of its awareness of the very great likelihood that increased demand will flow from lowered rates. The commission has commented frequently, too, upon the increased consumption which has accompanied (if, indeed, it has not resulted from) rate reductions and vigorous appliance selling campaigns during the thirties. See 19 Annual Report, p. 5; and 20 Annual Report, pp. 5-6.

¹⁵ 17 Annual Report, p. 14.

should not be reduced. Setting about its task with vigor, the commission added to its own staff and engaged a force of consulting experts. In the majority of cases "the commission's complete preparation convinced the companies that relief was due with the result that rate reductions were agreed to and promptly placed in effect,"¹⁶ but formal cases were instituted against three companies serving the area in and around Chicago.¹⁷ The case against the Public Service Company of Northern Illinois, discussed above, resulted in an order which reduced residential electric rates by approximately 11 percent, and total rates in the annual amount, on the basis of previous consumption, of \$1,300,000;¹⁸ the case against the Western United Gas & Electric Co. eventuated, after the company's testimony had been completed, in a negotiated order reducing residential rates by 20 percent, with a total annual reduction amounting to \$325,000;¹⁹ and the *Commonwealth Edison Company case*, after hearings which lasted almost without interruption from October 11, 1934, to July 2, 1936, and which produced some 20,742 pages of testimony together with 264 exhibits, concluded with a fair value in terms of "not in excess of ———", and an order which the company did not contest reducing total rates in the annual amount of \$3,000,000, of which \$2,500,000 was ordered for residential customers.²⁰

This initial action has been followed by proceedings and negotiations instituted on the motion of the commission in every subsequent year,²¹ and in its annual report for 1937-38²² the commission recorded a total estimated decrease in operating revenues resulting from ordered and voluntary rate reductions (calculated in each case on the basis of consumption during the 12 months immediately preceding the date of change) in the amount of \$13,282,087 for the period January 1, 1933, to June 30, 1938. In the same report,²³ the commission noted that the average annual consumption per residential customer had increased from 626 kilowatt-hours in 1932 to 777 kilowatt-hours in 1937.

It should be noted that the commission's internal procedure in the matter of instituting rate reductions on its own motion is somewhat less routine in character than that of the Wisconsin commission. The Illinois commission's rate reduction program has been vigorous and extensive, but it is not completely systematized. The commission does not attempt regular complete audits of annual reports submitted by utilities. Such reports are inspected for errors, and much information is discovered by the Department of Investigation which may serve as a starting point for negotiations or citation in particular instances, but there is no routine report from the auditing to the rates division along the line developed in Wisconsin. In this connection it is suggested by the commission's staff that the "book value" figures which serve as a basis for the Wisconsin procedure are, in

¹⁶ *Ibid.*, p. 15.

¹⁷ "It should be noted that the commission has secured rate reductions to electric consumers in practically every city in the State except Chicago." *Ibid.*, p. 16. As noted below, rate reductions for Chicago were secured.

¹⁸ Reductions in the electric rates of this company since 1934 amount to \$2,702,000.

¹⁹ *Ibid.*, p. 16.

²⁰ *Ibid.*; 18 *Ibid.*, p. 100; 19 *Ibid.*, p. 8.

²¹ Discussion of the commission's rate reduction activities undertaken on its own motion will be found in 17 Annual Report, p. 14; 19 *ibid.*, pp. 6, 10; 20 *ibid.*, pp. 9, 12, 13; and 21 *ibid.*, p. 8. Data on the amount of reductions both in total amounts and by classes of service, together, in some instances, with a classification of the reductions as "ordered" or "voluntary," will be found in appendices at the close of the Commission's Annual Reports since 1933.

²² No. 21, p. 144.

²³ *Ibid.*, p. 8.

Illinois, still too incomplete and "too recently reliable" to be so employed.²⁴ Another consequence of the fact that usable book value figures are not available is that rate reduction negotiations must proceed in the dark (in the dusk, at best) and that the public is required to place a very great degree of confidence in the "judgment" of the commission. Commission action on its own initiative is eminently desirable, and, in the present state of formal rate case procedure, it is equally desirable that negotiations should be substituted for formal citations, hearings, and findings. But the effectiveness of such action would be greatly enhanced if the negotiations were fortified with dependable data collected and used as a matter of routine.²⁵

THE RATE STRUCTURE

Even a casual acquaintance with the Illinois commission's annual reports for the past few years will convince the reader of the commission's active interest in the problem of rate structures. Again differing from the Wisconsin commission, the Illinois commission has promulgated no State-wide order relative to rate patterns; nor has it adopted the service-charge form which has been introduced generally in Wisconsin. A great deal of the commission's work in this field has been done informally, but in all recent formal cases as well as in connection with a large number of negotiated rate reductions, and also in several property merger proceedings, the commission has seized the opportunity to force a revision of rate patterns. As a result, electric rate schedules throughout the State are beginning to assume a common, simpler appearance.

The commission is on record in favor of "uniformity and simplicity of rate structures," as reflected in the "simple block form of rate for residential consumption;"²⁶ and it has approved (at least to the extent of permitting, if not encouraging) the so-called "objective rate" plan as a device to effect an orderly transition to simple rate forms²⁷ and as an answer to the utilities' contention that "prices should and would come down only when and after the use of electricity increased," and to the contention of customers and commissions that "the increased use should and will come after the prices are reduced."²⁸ Room-count rates have been under special attack by the commission, and, as suggested above, they have been eliminated or modified in favor

²⁴ It should be noted that the building up of "continuous inventory" figures which has been in process in Wisconsin for some time has not been undertaken in Illinois.

²⁵ In dealing with the commission's rate level and rate structure activities, attention should be called to the great support which the commission has given to the program of rural electrification in Illinois. Since the total program goes far beyond rate policies, and since many agencies other than the commission are involved, it will suffice for the purposes of this report to refer the interested reader to 18 Annual Report, p. 24; 19 *ibid.*, p. 24; 20 *ibid.*, p. 64; and 21 *ibid.*, p. 6.

²⁶ 18 Annual Report, pp. 13-14.

To refresh the reader's memory, the following typical block rate form, taken from the commission's order in Central Illinois Electric and Gas Co. (No. 26006), 20 Annual Report, p. 10, is given:

First 8 kilowatt-hours per month for 50.0 cents.

Next 18 kilowatt-hours per month at 5.5 cents per kilowatt-hour.

Next 54 kilowatt-hours per month at 3.0 cents per kilowatt-hour.

Next 120 kilowatt-hours per month at 2.0 cents per kilowatt-hour.

Over 200 kilowatt-hours per month at 1.5 cents per kilowatt-hour.

The commission has felt that the service-charge is politically inexpedient in Illinois, and that misunderstanding will be avoided and the interests of equity in rate making satisfactorily preserved by the employment of an initial flat charge as in the above schedule.

²⁷ 18 Annual Report, p. 14.

²⁸ Under the objective rate plan residential customers are simultaneously offered two rate schedules, one known as the immediate rate and one as the objective rate. The first of these rates involves a reduction in charges, and the second or objective rate offers additional reductions to those customers who increase their use by stated amounts over their use in a base period, which is usually the same month of the preceding year, or the average of the 12 months preceding the effective date of the plan. Such base uses are computed for each customer." *Ibid.*

²⁹ *Ibid.*, p. 17.

of block rates with a minimum charge.²⁹ Objective rates were introduced in the cases of the *Illinois Northern Utilities Company*³⁰ and the *Central Illinois Light Company*³¹ in 1935; and in succeeding years the commission was able to announce extremely satisfactory results in these, as well as in other instances.³²

In applications of the objective rate plan it was frequently provided that, after a stated period of a few years, the named objective rate would go into effect for all customers irrespective of their individual increases in the use of energy. In 1937 and 1938 the immediate rates were cancelled and the objective rates were put into effect for all customers of certain divisions of the two companies referred to just above. In all instances the Commission explicitly retains a continuing jurisdiction over the objective rate plan, with power to modify its terms in the light of experience.

There is little to be said relative to the handling by the Illinois commission of the extremely important problem of the substantive pattern of rates, i. e., the content of the rate structure—how the burden of total charges is to be distributed among all the various classes of customers. The commission's reports throw a minimum of light on the matter, and observations by members of the staff go little beyond the proposition that the commission seeks to maintain a "proper balance" as between classes of users. The author has reached the conviction—although it is impossible to support it by formal references and citations—that (1) the commission relies very considerably upon the judgment of the utility, and exerts its own influence largely around the conference table rather than in formal orders; (2) an attempt is made to ascertain the specific costs for which each class of users is directly responsible and to cover these, at least, in setting the rates for each class; (3) the commission is largely content to allow rates for industrial customers to seek their own level, on the assumption that competition is sufficiently active in this area, and (4) the commission is inclined to favor domestic over commercial customers on the theory that the latter are "on-peak" users, and on the ground that the former are politically more influential. Within the range of domestic consumption, it would seem that the commission's schedule of minimum bills with gradually falling rates for additional use are likely to induce a somewhat smaller total demand for service than would probably be stimulated by a rate form consisting of a service or demand charge followed by a sharply breaking charge for energy.

It is clear that the commission, both in its rate level and rate structure activities, is conscious of the desirability of increased utilization of electric plant and facilities, and that its efforts conduce generally to that end. But it is also true that the commission has not felt the need of articulating its general rate making philosophy beyond the broad propositions that lower levels of rates will stimulate consumption, that the service as a whole must be paid for, and that the balance of rates between classes must be "fair" in the mind of the commission, and so adjusted as to result in a minimum of public discontent. Any fuller implications of these propositions seem not to have been pursued.

²⁹ See particularly 19 *ibid.*, pp. 7, 9; 20 *ibid.*, pp. 12, 14, 15; and 21 *ibid.*, p. 8.

³⁰ No. 22344.

³¹ No. 22335.

³² See 19 Annual Report, p. 11 ff.; and 21 *ibid.*, p. 9 ff.

ADJUSTMENT TO CYCLICAL PRICE LEVEL

The Illinois commission's efforts to adapt electric utility rates to cyclical fluctuations have been confined to the general movement toward rate reductions in the period 1933-38 detailed above. The commission has permitted companies to introduce "economic" testimony of the sort offered by the Wisconsin commission and its corps of experts in the *Wisconsin Telephone* case, but it has introduced little on its own responsibility. It has voiced no opinion on rate changes as affected by the business cycle, other than that rates of return and earnings may properly be somewhat lower during periods of depression than in periods of prosperity, in the interest of "fairness and equity."³³ The commission has not spelled out any causal relationship between utility rates and recovery; and neither the commission nor its staff have evidenced active interest in proposals which look to the use of utility rates as a positive instrument to promote greater employment of resources in the whole economic system, through the intermediate effect of these rates upon spending, saving, and investing. The feeling is undoubtedly present that in the existing state of the law and practice of utility regulation, any commission action based on speculation in this field would be not only useless but harmful.

³³ The commission's complete position on the relation of utility rates to industrial depression would seem to be expressed in the following from its discussion of rate of return in the *Public Service Company* case (cited above), pp. 83-85. It may be noted that although this case was undertaken under the Commission's power to set temporary rates, the proceeding was in no substantial respect different from an ordinary case.

"The company claims a rate base in this case as high as, or higher than, at any other period in its history but apparently fails to recognize that a fair rate of return on such a rate base today represents a return of much greater purchasing power than would the same return in periods of high prices. If the same rate of return were allowed during periods of economic distress and low prices as during periods of prosperity and high prices, and with relatively little decline in the price level of the rate base, then the stockholders would actually profit by the world-wide depression. Such a policy would be unfair to the rate payers who have suffered drastic reductions in their incomes, but for the stockholders it would mean that their real return in bad times would be greater than the return in good times. * * * We believe * * * that public utilities, subject to regulation of maximum charges, should not be subjected to the shocks of an economic depression to the same degree as unregulated corporations but we also believe that public utilities are not to be completely insulated from such shocks by permitting a rate of return in periods of depression equal to that in periods of prosperity. * * * We believe that fairness and equity require this company to make reductions to its rate payers and accept a rate of return which is lower than that enjoyed by it during prosperous times, provided the rate is fair and reasonable during periods of economic distress."

The commission hinted at the possibility of adjusting rates so as to produce a fair average return over a period of years rather than solely with reference to successive annual returns, but the idea was not developed either then or later. (See p. 84.)

CHAPTER III

THE NEW YORK PUBLIC SERVICE COMMISSION

New York, like Wisconsin and Illinois, has subjected her statutes governing the regulation of public utilities to a thorough revision during the present decade. As a result, the State has had in operation for the past 6 years, at least, one of the country's more effective utilities laws.¹ The New York Public Service Commission, constituted by 5 members and a regular staff of some 350 employees and occasionally augmented by as many as 200 additional employees engaged for special work,² possesses full power over rates and service, and over complementary phases of utility operation—securities, accounts, intercorporate relations, etc.—which bear on rates and service.³ The policies of the New York commission for the past 10 years have been those of its chairman, Milo R. Maltbie, who has come through long experience to be the leading authoritative exponent of the negotiation method in rate making, and the severest critic of the employment of “scientific formulas” in the setting of rates and of resort to entangling and costly litigation. In the thirties the commission was vigorous and productive in its campaign for utility rate reductions. During the years 1931–38 total savings to consumers from rate reductions secured by the commission amounted to nearly \$50,000,000.⁴ The commission has also worked energetically and

¹ The major revision which took place in 1934 gave the Commission authority to assess the cost of investigations against affected companies; empowered the Commission to set temporary rates upon the basis of 5 percent upon original cost of physical property less depreciation, subject to later adjustment, and to require utilities to maintain continuing property inventories and currently available records of original cost; and gave the Commission far-reaching control over intercorporate structures, relations, and practices. See 1934 Annual Report, New York Public Service Commission, pp. 5 ff.

² For details see particularly 1937 Annual Report, pp. 155–156. Annual disbursements since 1929 have ranged from \$890,471 to \$1,147,384 (1936–37). See 1938 Annual Report, pp. 154 ff.

³ See Consolidated Laws, C. 48, Article 4. The only important recommendation for additional legislation which the commission has made in recent years consists of a request for statutory authority to “require” companies to set up on their books the amount of depreciation which the commission finds in a rate case and to continue the account so that there will be available at any time a statement on their books which can be used promptly for determining rates.” 1938 Annual Report, pp. 14–16.

⁴ The following table from 1938 Annual Report, p. 20, covers the record of rate reductions for all utilities under the commission's jurisdiction, 1931–38:

Year	Negotiations— no formal case	Negotiations in formal cases	Ordered in a formal rate case	Voluntary	To religious institutions to comply with statute	Total
1931.....	\$382,000	\$9,516,000	\$39,000	\$118,000	-----	\$10,055,000
1932.....	1,371,000	346,000	37,000	461,000	-----	2,215,000
1933.....	1,571,000	1,917,000	1,820,000	610,000	-----	5,918,000
1934.....	849,000	860,000	2,177,000	614,000	\$266,000	4,766,000
1935.....	26,000	10,723,000	inc. 703,000	4,414,000	-----	14,460,000
1936.....	165,000	173,000	5,707,000	1,023,000	-----	7,068,000
1937.....	601,000	7,308,000	1,310,000	1,647,000	-----	10,866,000
1938.....	368,000	1,178,000	937,000	850,000	-----	3,333,000
Total.....	5,333,000	32,021,000	11,324,000	9,737,000	266,000	58,681,000

The commission publishes no separate compilation of the preceding rate reductions, although in each of its annual reports an analysis of rate reductions during the preceding year lists each community and company affected, together with an indication of the type and class of service involved and the amount of the reduction. With reference to the total of \$58,681,000 shown in the above table, the commission noted that the

effectively in this period for the attainment of uniformity and simplicity in rate structures, and it has had a hand in introducing, developing, and testing most of the newer devices designed to facilitate the making of rates. Like the Wisconsin commission, although possibly slightly less "routine" in its method, the New York commission through its research and valuation department conducts a check of current operating reports, and undertakes at least preliminary inquiries (which may ripen into negotiations or even formal proceedings) upon finding returns in excess of 6 percent upon original cost less straight-line accrued depreciation. In light of the range of the commission's authority and the extent of its resources, together with the direction of its attitude, a study of its processes and policies during this period reveals something of the potentialities of administrative rate control over other industrial areas.

THE LEVEL OF RATES

The New York commission's approach to the problem of the level of rates is essentially orthodox, although the commission is much more thorough and scrupulous in its treatment and analysis of evidence than are many of its contemporaries in other States. The commission determines, with great care, the amount of income which rates must produce in order to cover operating expenses, depreciation, and taxes, together with a fair return on "fair value," "rate base," or "base cost," and then sets rates at a level designed, on the basis of past consumption, to bring such a return. Although the commission is more than usually aware of the expansion of consumption as a result of rate reductions, it makes no formal use of this in setting rates. In this respect it is willing at most to take into account some loose forecast of general business prospects. One may gather that the reluctance to bring this demand elasticity more directly into consideration grows out of the commission's belief that, after all, the rate of return which it allows is not high, and that it may be well to permit rates to be set which may produce more than the required return, as a cushion.⁵

amount is based "on computations which reflect the amount of business done prior to the date that each reduction was made, in some cases some time prior thereto. It is clear that, using the business done during 1938 and comparing the amount that would be charged for such business at rates in effect Dec. 31, 1938, as compared with those in effect Jan. 1, 1931, there would be shown savings to consumers of approximately \$65,000,000 per year. The cumulative effect of the savings to customers over the 8-year period 1932 to 1939, will be approximately \$260,000,000 disregarding the increased consumption due to reduced rates and the savings thereon." Ibid., 19. Details of rate reductions may be found in 1931 Annual Report, p. 9; 1932 *ibid.*, p. 18; 1933 *ibid.*, pp. 18, 20; 1934 *ibid.*, pp. 15, 16, 17; 1935 *ibid.*, pp. 15, 18; 1936 *ibid.*, pp. 25, 28; 1937 *ibid.*, pp. 23, 28; and 1938 *ibid.*, pp. 19, 22.

Mention might be made at this point of the commission's active interest in, and program for the development of, rural electrification. See the discussions beginning on the following pages of the commission's annual reports, as indicated: 1931, p. 11; 1932, p. 27; 1933, p. 32; 1934, p. 23; 1935, p. 25; 1936, p. 35; 1937, p. 81; and 1938, p. 78.

⁵ As indicating the commission's awareness of demand elasticity, note the following from its 1932 Annual Report, p. 16:

"As an effective means of increasing the use of utility services, rate reductions are most important. Increases in rates do not always produce larger net income, and conversely rate reductions often do not produce decreased net income. The latter often stimulate increased use, which use does not increase expenses in fixed charges proportionally, with the result that the net income is increased rather than decreased."

"We confidently believe that if the utilities in the State of New York were to make immediately substantial reductions in their rates, the amount of electricity, gas, and telephone service used would very greatly increase. Generally speaking, utilities have at present surplus plant, and as the increased service could be supplied at relatively low costs, the net income could be maintained or improved. Of course, reductions are not always followed instantly by increased use; there is usually some lag; but where substantial cuts are made, the response usually comes so promptly that the interval between rate reductions and increased consumption is short and can easily be bridged by any sound company."

And note the following from *In re Rates and Rate Structures (Electricity) in City of New York and Suburban Territory*, 1933 Annual Report, pp. 391, 420: "the companies here being considered may reasonably be required to reduce all electric bills for metered sales to general consumers by \$15,000,000"

"When considering the probable effects under a schedule of rates reduced 10 percent, two very important factors should be remembered—that reduced rates stimulate consumption and that increased sales do not involve a proportionate increase in costs."

"Fair value," to the New York commission is, more often than not, a hybrid original cost-reproduction cost figure, but the commission has been aggressive in its criticism of reproduction cost, and has demonstrated a definite leaning toward the use of an original cost rate base. The fact that the commission has not abandoned reproduction cost more completely is probably due to its fear of court reversal, and, even more, to its distrust of formulas. The commission prefers to be free to exercise its "judgment" in the light of factors surrounding each case. Its support of original cost is grounded in considerations of fairness and effectiveness; although the commission has written at length upon the valuation problem, it has not gone deeply into the economics of the subject. A rate base and a rate of return which can be arrived at readily, at little expense and with certainty, and which will be fair and will induce the flow of "enough" capital into the industry—these are the significant criteria. The commission finds that original cost measures well against these tests, but it realizes that courts may think differently and, besides, it sees nothing to be gained from tying its hands by sweeping commitments to use original cost under all circumstances.

In *Re Electric Rates, New York City & Suburban Territory, 1933 Annual Report*, page 391, the commission by a bare majority ordered a rate reduction in a temporary proceeding in the amount of \$15,000,000, on a showing that such a reduction would still enable a payment of 7.7 percent on the stated value of common stock, without drawing upon surpluses which averaged, in the cases of the seven companies involved, 19.53 percent of fixed capital. The commission had determined that adjusted excess income for 1932 had been \$23,023,703 in excess of 6 percent on stated value of common stock, and \$8,871,681 in excess of 6 percent on "rate base" (book value plus working capital, less depreciation reserves and public contributions). In a related case, involving the Queens Borough Gas & Electric Co., 1933 Annual Report, page 423, the commission used the same basic criteria—stated value of common stock, and a rate base computed by deducting retirement reserves and public contributions for extensions from "fixed capital" as reported by the company. In an earlier case, after elaborate investigation and detailed findings, the commission reported a rate base for the electric property of the Utica Gas & Electric Co., 1931 Annual Report, pages 208, 259–260, in the amount of \$19,789,267, after a determination of the company's book cost at \$20,510,366, reproduction cost new at \$20,216,861, depreciation at \$1,440,327, working capital at \$512,733, and going value at \$500,000.⁶

⁶ The company presented a claim of \$3,250,000 for going value, based on the usual opinion testimony. The commission reviewed the evidence with its customary incisiveness, disapproved of all lines of support, and then, amazingly, wrote \$500,000 into the valuation on the ground that "although we cannot find in the evidence offered by the company any proper measure of going value aside from that allowed by us as construction overheads, we believe that there is an element, including the value of trained personnel not otherwise set forth and to which we should give consideration and a value" (pp. 235–240).

This position on going value is in strange variance with the Commission's clear handling of most valuation items and problems; it must be attributed, it seems to the writer, to the Commission's determination to stay well within even the more remote bounds of constitutionality. For instance, after a review of court pronouncements and a devastating analysis of the Company's claims in *Investigation Rates of Long Island Lighting Co.*, 1935 Annual Report, p. 788, the commission concluded: "hence, every element of cost which has been named by any witness for the company as the cause or the basis of going value has been included in the amounts already allowed or will be included in operating expenses dealt with later in this memorandum. In order, therefore, to add something for going value, one must make an allowance for that which required no capital or operating expenditure; one must create something out of nothing; one must make an outright gift to the utility. Although the testimony in this case furnishes no adequate or proper basis for an allowance for going value in view of our determinations upon other points, a separate amount will be allowed, but it is believed that it is not required by the decisions of the highest courts in view of the character of the testimony. We find, therefore, that the going value of the electric property of the Long Island Co. as of January 1, 1930, does not exceed \$600,000 . . ." (pp. 941–953). In its most recent major decision, however, the Commission refused a separate named allowance for going value, relying upon the decision of the United States Supreme Court in the *Denver Union Stockyards case*, — U. S. — (1938). See *Electric Rates, New York & Suburban Territory (Queens Borough Gas & Electric Co.)*, 1933 Annual Report, pp. 454, 549–554.

The Commission refused to receive in evidence a proffered index-number calculation of valuation derived from the United States Bureau of Labor Statistics index number of wholesale prices for general commodities, excluding farm products and food, as having no bearing on the reproduction cost of utility properties, in Complaint, Washington Heights Taxpayers Association, 1932 Annual Report, pp. 341, 352 ff. In reducing rates temporarily pending final determination, in Bronx Gas & Electric Co., 1934 Annual Report, p. 621 (following the permissive statute of 1934), the commission relied entirely upon adjusted investment cost as its rate base measure; and in another temporary rate case—Rates Yonkers Electric Light & Power Co., 1934 Annual Report, p. 644—original cost was again employed. In a subsequent proceeding involving the Yonkers company, although no definite finding of value was made, the commission determined that the rate base used in the earlier case was in excess of the fair value of the property. (1936 Annual Report, pp. 599, 616.) But, in an extremely elaborate proceeding, culminating in a 259 page report supporting an electric rate reduction of \$1,225,000⁷ in 1935, the commission made a detailed investigation and definite finding of reproduction cost (\$25,159,862) as well as of original cost (\$28,801,621), in arriving at a "base cost" of fixed capital exclusive of land (\$27,598,358).⁸ It was pointed out that "in determining the base cost new the relative weight given to original cost and reproduction cost is not always the same. The various facts which have been pointed out in the previous pages regarding the way in which the figures were prepared have been considered in determining the weight to be given to each. But generally the original cost (the higher figure) has been given the greater weight."⁹ Needless to say, the "various facts" alluded to do not illuminate the process by which the commission's judgment transmuted the original cost and reproduction cost figures on each of some 30 accounts into 30 separate "base cost" figures and a final total "base cost." However, in the *Queens Borough case*,¹⁰ the commission found its earlier temporary rate reduction order to have been justified, and ordered a refund to customers, on the basis of a base cost determination made without the benefit of any reproduction cost testimony whatever (save with reference to market value of land); and in a subsequent proceeding to set rates for the future for the Queens Borough company,¹¹ modifications of base cost were made only to allow for subsequent additions at actual cost and retirements and depreciation. There seems little reason to doubt that if judicial determination will permit, the commission will rely increasingly upon original cost as the measure of "fair value," although a complete, explicit exclusion of reproduction cost need not be anticipated in the near future.

The commission's support of original cost is outlined in its discussion of original cost accounting and continuing property inventories in 1938 Annual Report, p. 33 ff. The system of accounts enforced by the commission provides that a continuing property record be set up and maintained by all of the larger electric (and other) utilities

⁷ Investigation, Rates of Long Island Lighting Co., 1935 Annual Report, pp. 788, 1026. Note: "The natural growth of the business, which even during the depression has averaged 6 percent per annum and the increased use due to reduced rates should materially reduce this assumed loss in revenues."

⁸ *Ibid.*, pp. 905-906. Land was taken at original cost, since testimony on other bases was inadequate (p. 907).

⁹ *Ibid.*

¹⁰ 1938 *ibid.*, p. 454.

¹¹ *Ibid.*, p. 696.

in the State, and that original cost be shown not only in this record, but in the property accounts themselves. "Inventories and determinations of the original cost of the property included therein have already been completed by most of the larger utilities in the State with properties aggregating \$1,500,000,000," and the commission is engaged in checking the utilities' figures. After pointing out that original cost is essential for proper accounting, but "perhaps even more useful in the determination of just and reasonable rates," and extolling its "continuing and permanent" character as contrasted with the variability of reproduction cost in rate making, the commission concludes, "recognizing the fluctuating standard which the reproduction cost theory would produce, certain utilities in recent years have ignored any attempt to determine value upon this basis and have restricted their efforts to original cost as a basis. * * *

It would be a mistake to suppose that the commission accepts unchallenged the original cost figures which appear on utilities' books. Both in its accounting supervision and in rate cases the commission has directed its critical attention to "write-ups," prices paid by purchasing companies in excess of original cost of construction (less depreciation) to the first utility owner of the property, and incorrect accounting for retirements.¹²

The commission has been a stickler for straight thinking and consistency in the treatment of depreciation. It is on record in favor of estimating accrued depreciation by the straight-line method, checked by detailed inspection and study; the consideration of obsolescence, inadequacy, and changes in the arts (as well as physical deterioration); and the adjustment of the operating allowance for annual depreciation to the facts and the allowance for accrued depreciation.¹³

With regard to "fair' return" the New York commission has evidenced a strong preference for 6 percent as the return to be allowed on the rate base, however measured, and the considerations to which it customarily gives attention are identical with those usually taken into account by all utilities commissions. In a case early in the decade¹⁴ the commission found, after considering the stability of the investment, returns in comparable enterprises, and present and anticipated money rates, that "a 7 percent rate of return is just, adequate and equitable to both the company and the public."¹⁵ In the *New York City case*,¹⁶ which sought the first establishment of temporary rates, 6 percent was accepted, without discussion of principle, as the rate of return by which excess return under existing charges was tested. In the *Bronx case*, shortly thereafter, proceeding under the 1934 temporary rate statute, the commission again based its computations upon 6 percent—"Since 6 percent is more than business enterprises which are not regulated have obtained upon the average

¹² 1938 Annual Report, p. 33.

¹³ See 1938 Annual Report, p. 36; Electric Rates, New York & Suburban Territory, 1938 Annual Report, pp. 454, 509-546; and Investigation Rates of Long Island Lighting Co., 1935 Annual Report, pp. 788, 909-931. In the latter proceeding, the commission lost its patience (p. 917): "When engineers of standing in their profession and corporation officials contend for such absurdities in order to bolster up the values of the properties owned by those who employ them, is it because they think that commissions and courts are so dumb, so unfamiliar with facts of common knowledge or so willing to be misled that they would adopt their views?"

¹⁴ Re Utica Gas & Electric Co. See 1931 Annual Report, p. 208.

¹⁵ *Ibid.*, pp. 240-242. "With an average cost of money of less than 6 percent, and a cost of slightly more than 6 percent for more than one-half of its capital such a return should permit of dividends considerable in excess of this 7 percent rate of return upon actual common stock investment as well as provide a surplus for contingencies" (p. 242).

¹⁶ 1933 Annual Report, p. 391.

during this depression, it is apparent that it is the maximum amount which should be allowed.”¹⁷

Turning from the temporary rate reduction cases to those involving the positive setting of rates for the future, after full deliberation by the Commission no change in its position is to be found. In the *Long Island case*¹⁸ the utility offered opinion evidence directed to the problem of the rate of return sufficient to attract investors—citing actual cash earnings, character of the territory served, character of the capital structure, ratio of debt to property, and operating efficiency as matters to be taken into account. The commission's answer is typical:

A witness who testifies that the average rate of return on the fair value of the property for all classes of securities (bonds, preferred stock and common stock) is or has been during the depression in excess of 8 percent shows either a lack of familiarity with the facts or a lack of proportion. A witness that admits that even 6 percent is far in excess of the return generally obtained by business corporations, which he said obtained “little if any” return, and yet declares 8 to 8½ percent is fair for utilities deserves little credence. His conclusions are at variance with all of the facts of common knowledge under the conditions that have existed since 1929 and particularly at present. Six percent is an ample return in view of determinations made upon other points in this opinion and particularly in view of the fact that the Federal income tax has been included as an operating charge.¹⁹

And in the final *Queens Borough case*,²⁰ the commission brushed aside what it seemed to regard as excessive claims supported by loose testimony offered by the company and substituted its own computations and judgment:

Rate of return is particularly a matter upon which the members of the commission accumulate day by day personal knowledge. The commission is continually passing upon the issuance of securities and thereby has direct and personal knowledge of the current cost of money and the cost over a long period of time. Within the last 3½ years, the commission has passed upon over \$1,000,000,000 in securities of all kinds and descriptions * * * for 3 years any gas and electric company conservatively financed and soundly conceived and engineered as been able to issue first mortgage bonds at an interest rate not in excess of 8½ percent when allowance is made for commissions and expenses in connection therewith. If the Queens Borough Gas & Electric Co. had limited its activities to the supply of gas and electricity, had managed its finances in a conservative fashion and had made adequate provisions for depreciation, it could have issued first mortgage bonds at a rate not to exceed 3½ percent. Likewise, it could have issued preferred stock in order to raise part of its capital at 5 or 5½ percent as a maximum. Its capital stock at a dividend rate of 7 percent would be selling at a premium.²¹

Computations made on the basis of a conservative capital structure showed the commission that—

on the basis of the current market rates for utility securities, which have prevailed for several years, a 6 percent return is ample and even generous. It exceeds the actual cost of raising funds for a public utility in this State which is soundly financed and properly conducted. Any utility corporation which cannot earn for its stockholders an adequate return upon the basis of a 6 percent return has neglected to conduct its affairs upon the basis of sound finance and engineering.²²

The fact that the Queens Borough Co. had so conducted its affairs for some time that a prospective return of 6 percent was not likely

¹⁷ 1934 *ibid.*, pp. 621, 626.

¹⁸ 1935 *ibid.*, pp. 788, 1012-1014.

¹⁹ *Ibid.*, pp. 1013-1014.

²⁰ 1938 *ibid.*, pp. 696, 698-704.

²¹ *Ibid.*, p. 700.

²² *Ibid.*, p. 702.

to meet fully the demands of its bondholders and stockholders did not deter the commission: " * * * the conclusion is inevitable that if the commission allows the company 6 percent return upon the value of its electric property as determined by the 'law of the land,' any deficiency in income to meet interest and dividends will not be due to the inadequacy of the return allowed by the commission."²³

The commission's rate level calculations have been made upon an annual basis—a fair rate of return upon fair value in each income year. It is true, however, that the commission has paid more attention than other commissions, formally, to the possible use of surpluses to eke out income deficiencies in depression years. In this the commission has had the support of the rate-making statute under which its actions are taken. Section 72 of the public service law provides that the commission shall give "due regard among other things to a reasonable average return upon capital actually expended and to the necessity of making reservations out of income for surplus and contingencies." Thus, in the temporary rate reduction case involving the city of New York,²⁴ the commission found added support for its reduction order in the fact that the seven companies under consideration had accumulated surpluses in the amount of \$160,000,000 (19.53 percent of their fixed capital).

If these companies may not fairly be required to contribute substantial sums from the surpluses which they have built up through rates charged consumers principally in the past 10 years, one may ask what are surpluses for? Are they not for the purpose of maintaining the financial status of the company during such years as those through which we have passed? If they are entitled to build up large surpluses and to go through four depression years, probably the worst in the history of the country, while declaring larger dividends than in 1929 without impairment to their surpluses, upon what grounds of fairness or equity should utilities be allowed to accumulate any surplus? Why should they not be held down to a minimum fair return in each and every year? The law requires the commission to consider in fixing rates allowances for surplus and contingencies. This is the very time when surplus earnings so created ought to be used for the benefit of the public. They do not belong in equity solely to the companies.²⁵

And later, upon rehearing,²⁶ after noting that the surpluses referred to in the original opinion (\$167,000,000) were augmented by some \$38,000,000 in contingency reserves:

If surplus and contingency reserves may not be used in the present crisis, and if this commission may not even consider the amount of surplus and contingency reserves when fixing rates, not for the purpose of reducing rates but for the purpose of permitting the company to maintain pre-depression dividend rates, three questions must be answered by those who maintain this position:

(1) Why were these companies allowed to charge such rates that their surpluses increased from about \$75,000,000 at the end of 1923 to \$150,000,000 at the end of 1929?

(2) What is the purpose of a surplus or contingency reserve unless it is for use in emergency cases such as the present?

(3) Why should not all companies be required so to reduce their rates as to prevent the accumulation of huge surpluses and contingency reserves?²⁷

Nonetheless, it remains true that seven years after the foregoing expressions the commission has still undertaken no formal program of averaging returns over stated periods of years, and that, with the

²³ *Ibid.*, p. 704.

²⁴ 1933 *ibid.*, p. 391.

²⁵ *Ibid.*, p. 416.

²⁶ *Ibid.*, p. 490.

²⁷ *Ibid.*, p. 523.

exception of giving vague "consideration" to surpluses, the commission deals with the return problem almost exclusively on an annual basis.²⁸

THE RATE STRUCTURE

The period of the 1930's has witnessed great activity on the part of the New York commission directed to a general revamping of the pattern of electric rates. Acting in individual cases rather than by general orders the commission has sought to achieve over wide areas (1) simplicity and uniformity of rate forms, (2) elimination of demand and customer charges for domestic customers, and for all commercial and industrial customers whose demands are not measured by demand meters, (3) the institution of block rates combined with minimum charges, (4) the elimination of optional rates, and (5) the discouragement of objective rates.

The commission has steadily contended that—

it is not sufficient that a rate schedule be scientifically sound (if there be such a thing); if possible, the rate schedule should be of such a character that it will be readily understood by the average consumer and that its fairness and economic justification be readily apparent. It may be that certain forms of rates are justifiable upon the basis of technical analysis, but if they cannot be understood and if their basis cannot be appreciated, popular suspicion and distrust often produces situations which are not beneficial either to the company or to the consumers.²⁹

And on the matter of uniformity, the commission has pointed out that—

* * * adjacent localities now served by a single company were previously served by many different ones. The different rates established in the early days have been continued, although there is no justification for any difference either in cost or value of service. These differences are being eliminated in most cases by reducing the higher rates to the level of the lower; but in some cases, it is necessary to increase rates in certain localities or to certain classes of customers to eliminate discrimination. In a number of cases, a dozen or so different rates have been combined into one or, at most, into one rate for residential customers, one for commercial customers, and one or two for power customers.³⁰

The commission has been persistent in its opposition to the presence of fixed demand and service charges in domestic rate schedules. In an early annual report the commission, while conceding that the demand made by a customer is an element both in the cost of serving him and in the value of service to him, pointed out that "certain rates still put too great emphasis upon demand, ignoring the fact that the diversity between demand of different customers is caused by customers with low load factors rather than by those with high load

²⁸ Discussion of the commission's rate level policies would be incomplete without brief reference to the commission's firm stand against the allowance of inflated claims for operating expenses in rate cases. The commission has been particularly caustic in its reaction to huge claims for legal and rate cases expenses and officers' salaries. See especially *Investigation Rates of Long Island Lighting Co., 1935 Annual Report*, pp. 788, 979, 986.

With regard to the relation between wages and rates it may be noted that in 1933, upon rehearings permitted to consider the changes, if any, which should be made in the earlier determinations on rates in the New York City area on account of increased taxes and increased expenses due to the newly instituted National Industrial Recovery Act, the commission allowed increased operating expenses in the amount necessary to cover wage increases which the companies were required to meet because of the minimum wage levels established under N. R. A. codes. See *Electric Rates, New York City and Suburban Territory, 1933 Annual Report*, 490, 495-514; and *ibid.*, 646, 649 ff.

²⁹ 1931 Annual Report, p. 10.

³⁰ 1932 *ibid.*, p. 21. The commission's annual report for 1936 contains the following interesting summary of results achieved by the commission in the matter of rate simplification and improvement, 1930-36 (p. 23)

Number schedules eliminated.....	102
Number classifications eliminated.....	951
Minimum charges reduced.....	581
Minimum charges increased.....	196
Service charges eliminated.....	119

factors." ³¹ And even earlier, in a long opinion from which the following quotation is taken, the commission spelled out the substance of its objections to service charges, and set forth the position on minimum charge-block rates from which it has not since departed:

The basis of the service charge is that certain costs are incurred by companies regardless of the amount of energy consumed, and that even if a customer uses no electricity, he imposes upon the company certain expenses which he ought to bear and which should not be shifted to other customers.

There is no doubt but that many facts and figures can be marshalled to support the service charge. There are costs incurred by every gas (electric) company which do not vary with the amount of gas (electricity) supplied. But there is great variety of opinion and little agreement as to what items should be considered in computing a proper service charge, and there is ample room for fantastic assumptions. One person includes in a proper service charge only such items as return, maintenance, and repair of meters, reading meters, preparation of bills, and expenses of collecting. Another person includes all of these items and adds administration expense, return and maintenance of services, and certain charges upon the distribution system. Another person includes all of these items and adds part of the cost for a transmission system and for a small initial generating plant.

Of course the amount of the service charge depends upon the items of cost that are to be included, and the results generally range from 50 cents to \$2 per customer * * *

The fundamental difficulty with all service charge estimates arises from two main considerations. In the first place, no plant was ever designed or constructed merely to supply a few kilowatt-hours per customer. Hence, any attempt to estimate customer costs requires certain assumptions. Conditions are pictured that have never been realized in actual experience.

The other main consideration is that rate making, whether for utilities or for competitive and private business, is never a mathematical application of a theoretical principle. In every business, there is always a large percentage of customers, who are served at less than cost, for the reason that it has been found impracticable to devise and apply a system of cost accounting and computation which would carry out the principle literally; and if it were done, it would result in such an elaborate and complicated schedule of rates that the public could not understand it and few could apply it. Customers would be irritated, and where possible, would use alternative services or buy of competitors * * *

Whatever may be said regarding the accounting or theoretical justification of a service charge, the important fact to be considered, after all else has been said is that the service charge often arouses great opposition. Regardless of facts and figures, the consumer is apt to consider the service charge, for which he is allowed to use no substantial amount of gas (electricity), as a charge for which the company renders no service or such small amount as to be negligible. It is frequently said to be "something for nothing." This viewpoint may be wrong, but the opposition to the service charge has led many utilities to abandon it, and it was the reason for the enactment of the present law as to gas service charges. In other words, the fundamental objection to the service charge is not so much economic or accounting as it is psychological.

On the other hand—

To hold that customers who have services and unlocked meters ready for use should pay nothing if they use no electricity, and if they use 1 or 2 kilowatt-hours in a month, should pay only a few cents for all of the service which they receive, seems unreasonable. Such a form of rate might be justified if there were such great social or public advantages that the cost of rendering service to small consumers should be shifted to other consumers, or if there were substantial equality upon the average among customers throughout the year. But if there is no such equality, someone must bear the burden; if small consumers are served at less than cost, other customers must be charged more than cost, in order that the company may obtain a fair net amount * * *

And hence—

* * * we are of the opinion that the minimum charge block form of rate should be adopted.³²

³¹ 1932 *Ibid.*, p. 22.

³² See *Rates, New York & Suburban Territory*, 1931 *ibid.*, pp. 433-435.

In this instance, the minimum charge set was \$1 per meter per month, for which the company was to furnish 10 kilowatt-hours. In the same case, the commission rejected a company proposal for the insertion of customer charges in commercial schedules, but acquiesced in demand charge of \$1 per kilowatt of maximum demand per meter per month, to be measured by rated capacity or by meter.

It is undoubtedly true that certain costs vary generally with the maximum demand. They do not all vary in direct ratio to the demand; but as demand increases, certain costs are increased; and this element should be recognized in a properly constructed rate schedule where the demand cost is such an important factor as in commercial and industrial service * * * the only accurate method of determination is to make a test by allowing the plan to take effect, and to adjust the method of charge as experience shows that it should be adjusted.³³

The commission has become even more set in its policy as indicated, and more vigorous in putting it into effect in the years succeeding 1931. In 1933 it reported that "the elimination of service charges and the reduction of high minimum charges has resulted in relief to small users of both gas and electricity"; and went on to point out that "much progress has been made in the last few years in eliminating residential rates based upon number of sockets, area of house, or number of rooms in house."³⁴ In 1936 the commission reported that "by statute, neither scheduled rates nor minimum charges for residential customers shall, after July 1, 1937, be based in any manner on the number of outlets, number of rooms, cubic or square foot area or other such standards."³⁵

By 1938 the commission had enlarged its field of rate structure reform: "Attention is now being given to improvement in the structure of rates for commercial and industrial customers." During the year the commission issued an order requiring that "in all cases where demand is considered in charging for electric service, the demands of all customers over 5 kilowatts be determined by meter."³⁶

The commission's objections to optional rates were voiced early and effectively:

The fundamental objection to * * * [optional rates] * * * is that in a given month two persons consuming the same amount of electricity, gas, or water, and under the same conditions of load and use, will pay different amounts, because one of the consumers may have made a better guess as to his total yearly consumption than the other, or because in other months during the year one consumer may use a larger amount of service or under different conditions. There are also instances where the different rates charged are attributable to the fact that one consumer does not know of the optional rates and the advantages of such rates have not been called to his attention.

The commission has attempted to eliminate the so-called optional rates as rapidly as possible * * *³⁷

Customers must choose in advance which rate they desire to be served under; if they choose wrongly, they suffer the consequences and the company benefits at their expense. The utilities refuse emphatically to assume the responsibility of placing each customer on the most favorable rate. If they, with staffs of trained experts, cannot do so, how can the customer, with little or no knowledge of rate structure, be expected to choose for himself?³⁸

³³ Ibid., pp. 437-438.

³⁴ 1933, *ibid.*, pp. 25-26.

³⁵ 1936, *ibid.*, p. 27.

³⁶ 1938, *ibid.*, p. 21. For an interesting discussion of the theory of demand charges, demand charges and promotional rates, the relation of demand charges to system peaks, etc., without, however, reaching a decision and order, see *Petition of New York Edison Co., et al.*, 1935, *ibid.*, pp. 571, 582-585. And see the discussion of minimum charges in *Complaint, Washington Heights Taxpayers Assn.*, 1932, *ibid.*, pp. 341, 346 ff., and of demand charges for "breakdown" service in *Re New York Edison Company*, 1936, *ibid.*, pp. 639, 648 ff.

³⁷ 1931, *ibid.*, p. 11.

³⁸ 1932, *ibid.*, pp. 21-22.

By 1937, the commission was able to report that—

with a few minor exceptions such optional rates have been eliminated for residential service. For commercial service, the number has been materially reduced * * *.³⁹

Unequal treatment of consumers is the feature of objective rates which has prompted the commission's unwillingness to endorse programs of this kind which have found high favor elsewhere in the country. The commission has not been overvigorous in its opposition, and it has not discussed the issues involved at length,⁴⁰ but its attitude is far from one of encouragement. One gathers, without the benefit of formal statement, that the commission believes that the promotional purposes of objective rates can be served by block rate forms and constant attention by the commission, through negotiation and temporary orders, to possible rate level reductions; and that the discrimination inevitably attendant upon the use of objective rates can thus be avoided. But it should be pointed out that, in principle and without regard to the content of particular schedules, rate schedules made up of fixed demand charges followed by sharply breaking energy charges are more likely than minimum-charge block rates to be promotional—that is, to increase consumption. Even the New York commission with its vigorous rate reduction policy is unable to force rates through ordinary processes to a level lower than can be justified by existing costs and existing consumption, whereas it is the merit of objective rates that they seek to promote the lowering of costs by inducing the increased consumption which will make such cost reductions possible.

In making up the substantive content of its rate schedules it seems probable that the New York commission is as much concerned with cost analyses and the desirability of inducing increased consumption as either of the other commissions included in this study; and its decisions and rulings—perhaps inevitably, in light of the character of the problem—seem to reflect very much the same traditional considerations of "fairness and balance." The commission will not knowingly set rates for any class of service which fail to cover the direct incremental cost of that service; beyond this point, however, costs do not appear to play a determinative part in the setting of individual rates. The commission does not favor setting different rates for different uses (for example—cooking, water heating, etc.), preferring to work out its rate pattern on the basis of quantities consumed and time of consumption. Nor does it appear that the commission seeks to achieve "social" ends through manipulation of relative rates (e. g., particularly low industrial rates in order to stimulate "recovery," etc.). It is possible, however, that the minimum charge set by the commission in the case of rural service, although higher than for urban service, is not sufficiently higher to reflect fully the greater cost. The commission is fully conscious of the usual factors influencing the distribution of the rate burden between domestic, commercial

³⁹ 1937, *ibid.*, p. 25.

⁴⁰ The strongest expression which has come to the writer's attention is the following:

"If it were not necessary to decide whether the rates in this form were to be continued, there would be several questions calling for careful consideration and final determination. One feature may be pointed out. This is the arbitrary limitation prior to January 1, 1938, the 'inducement' rates to those consumers who increase their consumption while excluding from its benefits those consumers who have already increased their consumption and who have assisted the company by so doing. The result is to charge different amounts for identical use under identical conditions of use to the disadvantage of the customer who had previously been the more profitable to the company." *The Yonkers Electric Light & Power Co.*, 1936, *ibid.*, pp. 599, 802.

and industrial consumers—"peak demand," "value of service," competition, etc.—but the record is not clear as to their relative weights in commission determinations. In distributing the benefits of a general reduction in rates, the commission finds it more than usually appropriate to discard "scientific" formulas, and, with confidence born of an able staff and the long experience of its chairman, to rely upon judgment in the midst of such a labyrinth of considerations and factors as "local conditions," "relative size of classes," "rate comparison," "customary balance," "who has been protesting?", and "who benefited most from previous reductions?" It is not likely that the relative response of consumption by different classes of users to rate reductions—a consideration of some importance if maximum utilization of facilities is the goal—is ever taken explicitly into account.

ADJUSTMENT TO CYCLICAL PRICE LEVEL

The attitude of the commission toward the adjustment of utility rates to the trend of prices in general and to other cyclical phenomena, during periods of depression, at least, is rather fully disclosed by the commission's rate orders over the first half of the decade of the thirties, and by its conduct of and expressions in its major temporary rate reduction proceeding. The commission was extremely active in the matter of rate reductions during the first and middle years of the depression. During this period it asserted its power to set temporary emergency rates wherever the facts relating to a company as set forth in its reports to the commission appeared to call for a downward revision of charges, and adopted as its basic policy the use of negotiations and conclusion of rate-reduction settlements without the delay attending formal cases.⁴¹

In *Electric Rates, New York City & Suburban Territory*, the commission set the scope of its inquiry in the following terms:

The commission intends in this investigation to ascertain to what extent the various companies have been affected by the depression, their dividends curtailed and surplus earnings used up. We shall consider to what extent utilities may fairly be required, through reduced rates, to assist in escaping from the present depression, unequalled in the history of this country.⁴²

The commission asked two economists to prepare statistical data and to testify relative to the character and extent of the depression, and the companies offered testimony bearing on the same general topic. An examination of evidence relating to the course of wholesale prices, manufacturing production, freight car loadings, employment, pay rolls, farm incomes, relief expenditures, and profits and dividend rates of business corporations convinced the commission that the country was experiencing a "financial hurricane" of such proportions as to call for radical remedial measures. Turning to the effect of the depression upon the utilities, however, the commission found that the New York electric companies had been left practically unscathed. The nine

⁴¹ The facts relating to rate reductions are set forth above.

⁴² The commission's temporary rate orders have had a varied career: Those involved in proceedings prior to revision of the temporary rate section of the Public Service Law (art. 4, sec. 72), in 1934, were held invalid in *Matter of New York Edison Co. v. Maltbie*, 244 App. Div. 436 (1935); but the temporary rate orders taken under the revised statute were affirmed in *Bronx Gas & Electric Co. v. Maltbie*, 271 N. Y. 364 (1936).

The commission has been particularly conscious of its policy of rate negotiations. Its Annual Reports (1931, p. 6; 1932, pp. 16, 17; 1933, p. 18; 1934, p. 15; 1935, p. 17; 1936, p. 27; and 1937, p. 25) undertake at considerable length to defend the practice against charges of looseness and arbitrary action, on grounds of speed, economy and essential fairness. See also *Complaint, Washington Heights Taxpayers Assn.*, 1932 Annual Report, p. 341.

⁴³ 1933 Annual Report, p. 391.

companies involved were paying dividends as a group in 1932 at a rate of 16.5 percent higher than the group rate for June 1929. No company had earned less than 5¼ percent on "rate base" during the depression, and one company had earned 16½ percent in 1 year. From 1923 to 1929 the surplus of the group had doubled, and between 1929 and 1932 it had increased by \$17,000,000 (over 11 percent). These returns were in marked contrast to those experienced in other industries. The commission paid particular attention to the measure of 6 percent return on common stock, in arriving at its estimate of excess earnings:

* * * when considering what a company can reasonably be required to contribute to assist in ending the depression and to aid the financial recovery of the country, the excess of income over 6 percent on the stated value of the common stock is more important than the relation which its income bears to the book value of its property.⁴³

The statement just quoted constitutes as full an expression as the reports contain of the commission's philosophy of the relation of utility rates to recovery. Utilities should be required to institute rates designed to enable them to pay not greatly in excess of 6 percent on common stock, in the interests of fairness to consumers, equity as between industries, and the achievement of industrial recovery—and, incidentally, such rates are likely to stimulate increased consumption (and greater earnings). The commission's ideas have never explicitly gone beyond the proposition that lower utility rates in periods of depression will probably help in "getting things started." They have never embraced a positive position based on analysis of, and conclusions with reference to, any of the more elaborate explanations of the business cycle. Certainly considerations and speculations relating to the effect of lower (or higher) utility rates upon spending, saving, and investing generally throughout the economic system would receive rough treatment at the hands of Chairman Maltbie.

⁴³ Ibid., p. 411.

CHAPTER IV

THE TENNESSEE VALLEY AUTHORITY

The institution and the policies of the Tennessee Valley Authority reflect, in some slight measure at least, a condition of growing public dissatisfaction with current procedures and policies in the public regulation of privately owned utilities. Whether this dissatisfaction is warranted to any great degree, and whether Government ownership is the most feasible alternative to the typical regulatory situation, are no concern of this report. It will serve present purposes merely to point out the ways in which the rate level and rate structure policies of the Tennessee Valley Authority differ from those of the more effective regulatory commissions, and the possibilities for a positive public policy on the relation of utility rates to full use of electric facilities and full employment of economic resources in general that are opened by the adoption of public ownership and operation.

Set up by the Tennessee Valley Authority Act of 1933, and amended in 1935, the Tennessee Valley Authority, a Government corporation is directed to undertake a program of flood control, improvement of navigation, reforestation, provision of proper use of marginal lands and agricultural and industrial development in the Tennessee Valley, the manufacture of fertilizer, provision for the national defense; and so far as may be consistent with the purposes of promoting navigation and controlling floods, to provide and operate facilities for the generation of electric energy for the use of itself or the United States, and to generate, transmit and market electric power, within stated limits, "to assist in liquidating the cost or aid in the maintenance of the projects of the Authority."¹ Power is sold by the Authority directly for use to industries, and for resale to municipalities, cooperatives, and private utilities. The rate policies of the Authority come into play both in the prices which it charges for energy and in the rate standards for resale of energy which it writes into its contracts with distributors.

The key to Tennessee Valley Authority rate policy in general is to be found in the provisions of sections 10 and 11 of the act that "the projects herein provided for shall be considered primarily as for the benefit of the people of the section as a whole and particularly the domestic and rural consumers to whom the power can economically be made available, and accordingly that sale to and use by industry shall be a secondary purpose, to be utilized principally to secure as sufficiently high load factor and revenue returns which will permit domestic and rural use at the lowest possible rates and in such manner as to encourage increased domestic and rural use of electricity," and, further, that the Authority shall "make studies, experiments, and determinations to promote the wider and better use of electric power for agricultural and domestic use, or for small or local industries, and it may cooperate with State governments or their subdivisions or agen-

¹ Sec. 9a.

cies, with educational or research institutions, and with cooperative or other organizations, in the application of electric power to the fuller and better balanced development of the resources of the region."

THE LEVEL OF RATES

The most notable difference between the rate policies of typical regulatory commissions and those of the Tennessee Valley Authority exist with reference to the level of rates (rather than the rate structure), and in terms of approach rather than formal standards. Congress has stipulated that the revenues derived from the sale of power shall "as soon as practicable" be sufficiently great to cover the total cost of power production—a standard essentially identical to that under which rate levels of privately owned utilities are typically determined.

It is hereby declared to be the policy of this act that, in order, as soon as practicable, to make the power projects self-supporting and self-liquidating, the surplus power shall be sold at rates which, in the opinion of the board, when applied to the normal capacity of the Authority's power facilities, will produce gross revenues in excess of the cost of production of said power * * *.²

Indeed, to the extent to which the provision quoted relating to "liquidation" may be interpreted by the Authority to require the collection of revenues to repay capital costs in addition to depreciation, the rate level standards are even more stringent in the earlier years of the enterprise than those employed in the case of regulated private utilities. The conclusion that the standards are much the same is reinforced by the congressional requirement that the Authority shall, in its determination of costs, find the "present value" of such properties as were turned over to the Authority, and shall report the amount of the value of these and subsequently acquired or constructed properties which it shall allocate to "the development of power."³ The Authority is required further to operate under such a system of accounts and records "as may be helpful in determining the actual cost and value of services, and the practices, methods, facilities, equipment, appliances, and standards and sizes, types, location, and geographical and economic integration of plants and systems best suited to promote the public interest, efficiency, and the wider and more economical use of electric energy."⁴

The significant differences between commission and Authority rate level policies become immediately apparent when two things are realized:

First, because of the inherently "purposive" character of any allocation of common costs as between the navigation, flood control, and power activities jointly served by these costs, any final statement of power cost will depend largely upon the purpose which the statement is intended to serve. Much of the T. V. A. investment serves other uses in addition to the production of power. T. V. A. power costs can be increased or reduced within very wide limits of reasonableness merely by including therein a larger or smaller proportion of the common investment. The allocation actually employed by the Authority, although one of several allocations easily permissible under the terms

² Sec. 14.

³ *Idem*.

⁴ *Idem*. This is not to suggest, of course, that the amount of the various items of cost are necessarily the same in the case of privately owned and Government owned utilities. For example, their available rates of interest may be quite different.

of the T. V. A. Act (sec. 14) ⁵ is, nonetheless, quite different from any allocation urged by the advocates of private power.

Second, from the outset it has been the Authority's policy to set rates which ought to be paid for electricity in the Tennessee Valley in light of experience elsewhere—in the belief that such rates will induce consumption and consequent production of power in quantities that will lead to a lowering of unit costs to a level that will be covered by revenues. The issue to which this policy is directed is an old one. Regulatory commissions have felt and still feel themselves bound by the engineering-cost approach; consumption and production must increase before costs will decline, and costs must be lower before rate reductions may lawfully be ordered. The most that even the more advanced commissions have felt was permissible under the law is to require the establishment of "objective" rates (with their attendant discriminatory effects) which would provide the utilities with full revenue protection while they explore the possibility of attracting completely remunerative increases in demand by offering promotional rates. The Authority, on the other hand, has adopted a commercial pricing policy familiar to every large-scale business enterprise which has had to find its markets in the face of vigorous competition.⁶ If it may be conceived that it is possible to set rates on different levels, all of which, with the corresponding amounts of consumption which they will induce, will produce returns approximating full costs it would seem to be the positive purpose of the Tennessee Valley Authority to work steadily toward the establishment of the lowest of these remunerative levels.

As suggested above, the rates set originally by the Authority were not based upon T. V. A. costs, and, of course, they had to be announced before T. V. A. began to operate. In the spring of 1933, inquiries from prospective municipal purchasers made necessary the establishment of a schedule of rates at the earliest possible moment; Mr. Lilienthal was placed in charge of power policies, and the first drafting of rates was assigned to Mr. Llewellyn Evans, chief electrical engineer of the Authority and former manager of the Tacoma, Wash., municipal plant. Mr. Evans' rates, based largely on his own experience and on the record of experience under Canadian hydro-electric rates, were revised after extensive conferences with rate experts employed by and associated with the Wisconsin Public Service Commission and the New York Power Authority, and, after further study by the technical staff of the Authority, were tentatively promulgated in September

⁵ Sec. 14 provides, in part, "The board shall make a thorough investigation as to the present value of Dam Numbered 2, and the steam plants at nitrate plant numbered 1, and nitrate plant numbered 2, and as to the cost of Cove Creek Dam, for the purpose of ascertaining how much of the value or the cost of said properties shall be allocated and charged up to (1) flood control, (2) navigation, (3) fertilizer, (4) national defense, and (5) the development of power. The findings thus made by the board, when approved by the President of the United States, shall be final, and such findings shall thereafter be used in all allocations of value for the purpose of keeping the book value of said properties. In like manner, the cost and book value of any dams, steam plants, or other similar improvements hereafter constructed and turned over to said board for the purpose of control and management shall be ascertained and allocated."

⁶ Note the following from the Report of the Joint Committee Investigating the Tennessee Valley Authority, 76th Cong., 1st sess., S. Doc. No. 56 (referred to hereinafter as Joint Committee Report), p. 190:

"(1) Before the establishment of the Authority, there was sufficient experience to prove that drastically reduced rates would not be confiscatory in relation to economical or prudent investment values, but would yield substantial returns to private capital representing actual investment."

"(2) The major part of this prior experience was found in Canada, the facts about which were not widely known in the United States."

"(3) The theory of fair return on value, which could not be defined in practice in the absence of competitive standards, made it impossible for regulatory commissions to impose promotional rates."

"(4) The power industry, where it was not faced with public competition, refused to take the attitude common in mass-production industries, of voluntarily setting low prices and looking for profits from a large volume of sales."

1933 and officially adopted 2 months later.⁷ The rates were designed to be fully remunerative, but they were grounded upon anticipated consumption and income, and the lower costs which it was anticipated such consumption would make possible—and the anticipations had their basis in relevant experience outside the Tennessee Valley, as well as in elaborate studies by the Authority of demand possibilities within the valley—studies, incidentally, which have been established on a continuing basis. The rates as set were drastically below those previously in effect in the valley—as much as 50 percent below, in some cases—and were intended to make possible the economies of mass production, by mass consumption.⁸

The Authority's power policy was outlined by Director Lilienthal in a statement issued in August 1933, the principal points of which were:

The business of generating and distributing electric power is a public business. Private and public interests in the business of power are different in kind and quality. The right of a community to own and operate its own electric plant is undeniable.

The interest of the public in the widest possible use of power is superior to any private interest. Where these interests conflict the private interest must yield to the public. But when reconciliation may be made to protect the private interest without injury to the public, such reconciliation should be made.

The fact that action by T. V. A. may have adverse effect upon privately owned utilities should be a matter for serious consideration by the board in framing power policy, but should not be determining. T. V. A. should seek to avoid construction of duplicate facilities or wasteful competition with existing utilities; but the supreme consideration is making available power to the public at the cheapest rate consistent with sound financial policy.

T. V. A. accounts should show costs of power, and should be open to the public.

T. V. A. should begin operations by serving an integrated economic area around its plants and main transmission lines; it should serve outside such an area only if high rates or inadequate public regulation make such service necessary to protect the public interest.

And this policy, translated into rate level and structure principles, was given expression by Mr. Evans, in the following interview as reported in the Joint Committee Report:

Lowest rates occur where largest possible volume is delivered at each meter.

Even small customers should be given a chance to buy some low-cost power within their requirements.

After all other uses in a residence have been supplied, house heating is a market for low-cost energy, and a customer who has already taken his other requirements should get energy for this purpose at increment cost comparable to the low unit costs at the end of power schedules.

Large customers should benefit only to the extent that the larger apparatus needed is cheaper per unit than small equipment.

Where surplus power is available and there is a market for it, the price should be made low enough to get the business.

A public plant should provide for the payment of a fair tax.

Rate schedules that are low enough can be simple in statement, uniform in application, and few in number. High rates breed special schedules.⁹

It will serve no useful purpose here to review the long standing controversy as to whether or not T. V. A. rates are actually set at a level which will return revenue equal to full cost; in dealing with policy it is sufficient to note that it is the Authority's avowed objective to establish rates on a completely remunerative plane, and it is a matter only of secondary interest that the majority of the joint congressional in-

⁷ See Joint Committee Report, p. 162; and appendix B, p. 245.

⁸ See address by David E. Lilienthal, "T. V. A. and the Widening of Economic Opportunity," January 16, 1940. And see, also, the report "Economic Analysis of the Tennessee Valley Authority Power Yardstick," by Leland Olds, Joint Committee Report, appendix A, pp. 197-234.

⁹ *Ibid.*, appendix B, pp. 244-245.

vestigating committee accepted as "reasonably conservative" estimates of its engineering staff that "on this basis the estimated revenues would pay for all power costs and also would cover the annual expenses of navigation and flood control and return the total investment in these programs in about 50 years," whereas the minority members of the committee found that "the electric power operations as now planned and as planned for the future, and at the rates now prevailing, inevitably must result in a loss which must be made up by the Government."¹⁰ Differences in anticipated results are due, of course, to differences in predicted markets and revenues, and divergent views on interest rates, depreciation, and allocation of common costs.¹¹ It may be noted in passing that in its most recent published annual report, the Authority announces, with supporting data, that its power operations are on a completely paying basis.¹²

Regardless of one's opinion on the self-supporting character of the Authority's power program, however, there can be no reasonable denial of the fact that the rate program adopted by T. V. A. has achieved a phenomenal increase in the use of electric power throughout the Tennessee Valley.¹³ The Authority's annual reports, its special studies, and evidence presented to the joint committee all confirm the Authority's statement in its most recent annual report that

A most vital element in the increased demand for power, setting the Tennessee Valley area apart from the country in general, was the low-rate policy initiated by the Authority through its power contracts with municipalities and cooperative associations and followed through, although to a lesser extent, by privately

¹⁰ Joint Committee Report, pp. 252 and 303.

¹¹ The majority of the committee accepted the Authority's allocation—a "judgment" figure, as it was bound to be, closely related to the so-called "alternative justifiable expenditure" theory—which resulted in allocating the cost of the 3 completed dams in the percentages of 35 to navigation, 25 to flood control, and 40 to power; a combination of amortization and depreciation to provide a total annual retirement at the rate of 1.775 percent; and average taxes "almost identical with the average paid by the private companies." For full discussion of allocation, the reader is referred to the allocation report of the T. V. A. Committee on Financial Policy, dated June 6, 1938; and the unsigned comments on the T. V. A. allocation, dated August 18, 1938, distributed by the Edison Electric Institute.

With respect to the distributors of T. V. A. power, the majority concluded that "the Authority rate schedules have produced sufficient revenues to cover costs and fixed charges, and to return a substantial profit to small towns and cities. Their application to cooperatives is still somewhat uncertain" (Joint Committee Report, 253). And the statement continues: "With regard to the Authority distributors the committee concludes that their success is due to the adoption of a dynamic policy by the Authority, as contemplated by the act, of mass production and mass sales under drastically reduced rates, which is opposed to the static high rate policy of the private power industry" (*ibid.*, p. 254).

¹² 1939 Annual Report, pp. 58-59: "T. V. A. power revenue for the fiscal year 1939 totaled \$5,507,000, an increase of 135 percent over those of the preceding year. Energy sales for 1939 totaled 1,618,287,000 kilowatt-hours.

"These revenues provided a net income of more than \$1,478,000 after all expenses, including direct power expenses (management, operation of powerhouses, substations, and transmission system, promotion, etc.) and allocated expenses incurred jointly in the operation of the multipurpose dams for navigation, flood control, and power. The net income is also after provision of approximately \$1,736,000 for depreciation calculated on a straight-line basis (2.1 percent of the electric property)

"Net income on the 1939 power operations exceeded by a margin of nearly \$900,000 the net expense of the power program incurred during the previous 5 years. These 5 years represented a developmental period, common to most forms of business in their opening stages, in which a market for T. V. A. power had to be acquired and developed, and in which barriers of litigation hampered normal development. Over this period, up to the end of the 1938 fiscal year, the power operations of the Authority had resulted in a net expense of approximately \$584,000. Henceforth, there will continue to be a substantial margin of income over expenses which may be used to assist in the liquidation of the investment in other phases of the Authority's program."

A statement of income of T. V. A. power program for the year ended June 30, 1940 (made available by the Authority in a letter dated September 24, 1940), shows that the Authority's revenues from power sales were sufficient to cover 100 percent of the expenses of power, navigation, and flood control, both direct and common, and leave a net income of \$2,798,500. The expenses include provision of \$3,555,000 for straight-line depreciation on power properties; depreciation of \$719,400 on properties used jointly for power, navigation, and flood control; and depreciation of \$209,000 on properties used directly for navigation and flood control. With an average investment in power facilities for the fiscal year of \$173,000,000, the Authority's power revenues were sufficient to cover all of the expenses of the electricity operations, including allocated common expense but exclusive of interest on bonds, and leave a net income from the power program only of \$4,531,000. This amounts to a return of slightly more than 2.6 percent on the average power investment.

¹³ The Authority is the first to admit, of course, that some portion (exact extent unascertainable) of the increased demand for electricity is to be attributed to general improvement in economic conditions throughout the valley, and to intensive and highly successful electrical appliance selling campaigns. On this latter point, the Authority reported in 1939 (Annual Report, p. 77) that during the two preceding fiscal years \$5,300,000 worth of appliances had been sold to domestic users of T. V. A. power.

owned utilities. The experience of these agencies, both public and private, has demonstrated that the availability of power at low cost taps a vast demand for electricity in homes, on farms, in commercial establishments, and in industry.¹⁴

The supporting figures, on pages 76-77 of the same report, are thoroughly convincing:

* * * with a few exceptions, the experience of the agencies distributing T. V. A. power has clearly demonstrated the relationship between low cost and high use, a principle which has been generally applied in American business but only to a somewhat limited extent in the electrical industry, prior to the announcement of T. V. A. rate principles in September of 1933.

The average use of 1,179 kilowatt-hours for these agencies was well above the residential average of about 850 kilowatt-hours for the Nation. The average cost, 2.14 cents per kilowatt-hour was approximately half of the average of 4.21 cents per kilowatt-hour for similar service in the United States in the calendar year 1933. During the 1938 fiscal year, the T. V. A. average cost was 1.99 cents.

That the objective of maximum use of facilities is being approached is suggested by the Authority's statement that

* * * it now appears that the demands of the Tennessee Valley region will require new generating capacity in addition to that which has been supplied by the Authority plus that which is planned in the 10-dam system for the control of the Tennessee River.

The past few years have seen the demand for power in the Valley States increase at a rate more than double that for the United States as a whole. During the 12 months ending June 30, 1939, there was generated in the United States 123,034,000,000 kilowatt-hours of electricity, an increase of 29 percent over the 95,925,000,000 kilowatt-hours produced in the year 1929. In the seven Tennessee Valley States, power production has increased from 7,376,000,000 kilowatt-hours to 12,060,000,000, or more than 63 percent.¹⁵

THE RATE STRUCTURE

The rate structure policies of the Tennessee Valley Authority are manifested in several types of situations: In contracts for the sale of power directly to large industrial and utility users, in contracts for the sale of power to cooperatives and municipalities for resale, and, in connection with the latter contracts, the provisions inserted by the T. V. A. governing the rates at which power may be resold to residential, commercial, and industrial consumers.

The forms of rate schedules employed in direct sales to industries include a combination of demand charge and block energy charge in the case of firm power (always available) and interruptible power (subject to specified interruption by the Authority), and a demand charge alone (including energy up to 100 percent load factor on the demand) in the case of secondary power (available generally 75 percent of specified periods). Wholesale rates to municipalities are constructed on the demand charge, block energy charge plan. They contain a monthly demand charge followed by an energy charge arranged in four blocks, and are designed to reward large users and good load-factor users. Resale rates to domestic users contain a minimum charge rather than the (probably) more promotional demand charge, and begin with extremely low energy rates, followed by even lower blocks designed to tap demand for all residential uses of power. Resale commercial rates are similarly constructed, except that the size of the blocks and the minimum bill are larger. Certain commercial customers are given a Wright demand (or "load-factor")

¹⁴ 1939 Annual Report, p. 58.

¹⁵ *Ibid.*, p. 57. See also T. V. A. Statistical Bulletin No. VI, "Disposition of Consumers' Savings under T. V. A. Rates" (May 1935); and No. VIII, "Economics of Electric Distribution" (May 1936).

rate schedule. The resale rate for industries is a combination demand charge energy charge schedule.

In the matter of the substantive content of the rate structure, the T. V. A. would seem to have made its most unique contribution in its treatment of domestic consumers under its resale contracts. The rates established on direct sales of power to industries and public utilities¹⁶ reflect a number of considerations: The Authority's bargaining power, general industrial conditions, the desire on the part of the Authority to attract a substantial industrial load—that is, to encourage the growth of industrial customers—and the fact that industrial customers have been willing to take power that would otherwise have been wasted. This latter factor has a dual aspect: important industries who were potential users of T. V. A. power were present in the valley at a time when T. V. A. sales to municipalities had scarcely begun, and it seemed desirable to offer rates which would induce them to take up some of the slack during the Authority's developmental years; in addition, industries were willing to contract for a type of power (secondary, interruptible) which municipalities could not use. The Authority's pricing at this point seems both understandable and commercially sound, and in no sense unusual.

The Authority's wholesale rates are designed to tie in with its resale rates in the development of its over-all policy; they must encourage purchase for resale, and to that end must represent a price at which municipalities which undertake to resell under T. V. A. schedules can afford to buy—and they must, at least in time, be fully remunerative.

Resale rates as a group are intended to cover the full costs of the contracting municipalities, including operating costs, tax equivalents, and a return on investment, or interest on and amortization of debt. In striking the balance between domestic, commercial, and industrial consumers served by T. V. A. distributors, however, the scales seem to be weighted substantially in favor of the householder.¹⁷ As suggested above, the act is specific in its direction that domestic consumers be given particular consideration; and Authority pricing policy from the beginning has been built around the rates to be paid by the small (even low income) residential user. The top rate in the typical residential schedule set up by the T. V. A. is 3 cents per kilowatt-hour for the first 50 kilowatt-hours; and while there is a 75 cent minimum bill, there is no demand charge.¹⁸ It is difficult to resist the conviction that these rates, while intended, of course, to be so low as to attract increases in "paying" consumption, were designed to make some electricity available even to the very small, "unprofitable" customer who otherwise would have no electric service whatever in his home.¹⁹

¹⁶ The principal industrial concerns are the Aluminum Co. of America, the Electro-Metallurgical Co., Monsanto Chemical Co., and Victor Chemical Works. The contracts with these concerns are analyzed at great length in joint committee report, appendix B.

¹⁷ This does not mean that the other groups are treated at all badly; indeed, industrial rates are offered at levels at which it is expected that industrial customers will be attracted, and commercial rates are not conspicuously higher than their relative position under the better regulatory commissions.

¹⁸ The complete basic residential schedule is:

First 50 kilowatt-hours, at 3 cents per kilowatt-hour.

Next 150 kilowatt-hours, at 2 cents per kilowatt-hour.

Next 200 kilowatt-hours, at 1 cent per kilowatt-hour.

Next 1,000 kilowatt-hours, at 0.4 cent per kilowatt-hour.

Excess, 0.75 cent per kilowatt-hour.

Minimum monthly bill, \$0.75.

The increase to a 7.5 mil rate for consumption over 1,400 kilowatt-hours (7.5 mils being the average of the cost of the first 1,400 kilowatt-hours) is characterized in the joint committee report, appendix B, p. 248, as "a fair charge for extended use by unusually large farm residences or by special heating installations."

¹⁹ Exhaustive testimony concerning T. V. A. power policy will be found in the evidence given by J. A. Krug, chief power engineer, before the joint investigating committee. See Hearings, part 12, pp. 6189 ff., and part 13, pp. 5611 ff.

ADJUSTMENT TO CYCLICAL PRICE LEVEL

There are two points to be made with reference to T. V. A. rate policy and the alleviation of industrial depression and underemployment of resources. First, the Tennessee Valley Authority has given no attention whatever to the relation of the prices of electricity and the rate of use of resources in industries generally; second, the Authority is almost completely free from the restrictions which apply to and prevent State utilities commissions from developing activities in this area of policy. The Authority's low-cost rate program has been quite unrelated to the depression prevailing in the thirties, and has contained no features not explainable in terms of the thesis that low rates will induce a great increase in profitable consumption of electricity, and that it is the task of the Authority to spread the use of electricity, particularly by domestic and rural consumers, as widely as possible—so long as total costs are covered—throughout the valley. On the other hand, if suitable standards for treating this problem should be forthcoming, and if the T. V. A. should develop an active interest in the problem, there are no necessary legal barriers to a positive rate program under which the Authority might rework its rate levels and structures in terms of the effects of electric rates upon investment, saving, spending, and employment in the economy at large. Administratively, the Authority is well constituted to handle such a program. This is to express no opinion on the desirability of directing rate policies to the ends here suggested if those ends should demand policies inconsistent with the goal of low rates and full use of electric resources; the point is, simply, that the development of any program which seeks ends and employs criteria drawn from outside the field of electric power would be more feasible in the hands of such an agency as T. V. A., than under the direction of any regulatory commission. The freedom with which the Authority has been able to launch its vigorously promotional level of domestic rates, in contrast to the legal difficulties typically encountered by regulatory agencies, suggests that regulation is no match for Government ownership in the inauguration of policies that break sharply with the past.

PART II

PUBLIC PRICING OF MILK

By

**WARREN C. WAITE, DON S. ANDERSON
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PREFACE

This study of price fixing by governmental authorities in markets for fluid milk is an analysis of the objectives which public price control is intended to serve, the standards set by law or administration to serve those ends, and the way in which public regulation has, in fact, operated. Five States—Oregon, California, Indiana, Wisconsin, and New York—have been chosen to illustrate the operation of State regulation of milk prices under different types of laws and different local situations. The operation of Federal milk regulation is also discussed.

Public regulation of milk markets in the early 1930's had its inception in attempts by various organized groups in each market to maintain their previously established positions. The period of expansion culminating in the late 1920's had stimulated efforts of the various groups in each market to organize to insure for themselves a share in this expansion. The principal groups were the large distributors, with their informal trade associations and milk bottle exchanges; the employees of the distributors with their unions, especially the drivers; and the producers with their cooperative organizations. The various control devices served their intended purpose fairly well during the period of expanding business activity in the 1920's, and there were probably some monopoly gains that were shared by all three groups. Then the depression brought business expansion to a close and markets began to contract. This left a smaller total quantity of receipts to be distributed among the various market groups, and under pressure of the changed economic situation the previous arrangements for adjustment in the market failed as each group sought to maintain its old position. Eventually a general collapse in markets ensued. The farmers were in the more exposed position. Prices paid farmers for milk fell more rapidly than distributor margins and wage rates. Some new method of adjustment was desired and producers, in particular, began to press for public regulation of the markets.

The farmers had for many years endeavored to improve their position by the formation of cooperative organizations. Not much progress had been made prior to 1916, but the leaders had acquired a broad background of experience. The price difficulties of the World War period led to rapid expansion in organization, and by the beginning of the depression in the early 1930's a considerable portion of the milk in the larger markets was handled through cooperative marketing organizations.

The most important service of the cooperative for its members is in selling milk to the distributors. The member of the cooperative agrees to sell his milk to the cooperative or to appoint the cooperative the sole sales agent for his milk. The cooperative generally agrees to sell the milk of the member and to return to him the proceeds less a charge for the services performed. This organization for marketing placed the producers in a better bargaining position than they would have occupied as individuals.

The primary aim of these organized farm groups is to obtain as large a total income as possible for their member milk producers. The attainment of this aim has led to the development, in most markets, of a series of rather complex pricing arrangements. Although most markets developed some special features to meet their individual requirements, the general plan was essentially similar in a broad way for the majority of them. In the determination of the price to be paid by the distributors for the milk purchased by them the principal device which has developed is the so-called "classified-price" plan. This was adopted in many of the larger markets in the middle 1920's and by 1933 more than 70 markets were known to be operating under some variant of this plan.

The classified-price plan, first developed by the producer cooperatives, is a scheme by which different prices are paid for identical units of milk, depending upon the use to which the milk is put. Actually the milk received by the dealer is usually produced under the same health regulations and could all be used for sale in bottles as fluid milk if the market permitted. For excess milk, which cannot be marketed in this way, however, several different prices are paid, the number ranging from two to nine depending upon the particular market. Such a pricing arrangement is similar to the use-classification price differentials found in the sale of electricity, coal, and railroad services. It is supported by the contention that milk is not one commodity but several, the difference arising from the use which is made of it. The retail and wholesale price structure, utilizing "class prices" for different uses of milk, is determined in part by the competition which various types of milk products meet in various markets—e. g., butter versus margarine—and the prices at which these products can be marketed in volume. Thus, different returns result from the utilization of milk in different form.

The most widely used classification of milk and milk prices involves three classes: Class 1, constituting all the milk sold for fluid purposes; class 2, the milk sold in the form of fluid cream; and class 3, the milk manufactured into any of the variety of products made from milk, chief among which are butter, cheese, and evaporated milk. There are, of course, many variations among classified price plans. Springfield, Mass., for example, has had only two classes.

Class I milk—all milk sold or distributed by handlers as whole milk, chocolate milk, or flavored milk, and all milk, the sale or use of which is not established as class II milk.

Class II milk—all milk specifically accounted for (a) as being sold, distributed, or disposed of other than as milk, chocolate milk, or flavored milk, and (b) as actual plant shrinkage within reasonable limits.¹

In contrast, the Pennsylvania Milk Control Board has established eight classes of milk for the Philadelphia market:²

Class I, fluid milk (grade A), fluid milk (grade B).

Class II, fluid cream:

Class II-A, milk chocolate, candy, etc.

Class II-B, ice cream and ice cream mix.

Class II-C, farmers' pressed cheese and cream cheese.

Class III, butter:

Class III-A, American cheese.

¹ Economic Brief with Respect to the Proposed Milk Marketing Agreement and Proposed Order for the Springfield, Massachusetts Marketing Area, March 30, 1936, p. 20.

² April 2, 1934, Official Order No. 6.

In the New York metropolitan area there were 9 classes in 1939. The number was later increased to 10 classes.

The prices to be paid for the various classes, in the absence of regulation, have been the subject of negotiation between the producers-cooperative organization and the distributors.

The problem of allocating the proceeds received from distributors for milk among the producers was met by the development of sales-returns pools. These pooling or averaging procedures were necessary because it would be impracticable to record the exact class use of the milk of each individual producer and to pay him accordingly. Moreover, efficiency in assembling and marketing has required that all of the milk of some producers must be sold in uses returning relatively low prices. In consequence, pooling was necessary to prevent discrimination in the allocation of milk in the lower price uses, and to permit all to share in the returns from milk used in the higher priced uses. Three general types of pools have been used: Individual-distributor, association, and market-wide pools.

In the individual-distributor pool, the producer receives the weighted average of the class prices paid by the distributor to whom his milk was sold. Different distributors will pay different average prices, but all the producers delivering to a particular distributor will receive the same price except for special premiums or discounts. With an association pool, the producers' price represents a weighted average of the class prices received by the association for all the milk of its members. With a market-wide pool the producers' price represents a weighted average of the class prices paid by handlers for all milk in the market.

In addition to these pooling devices there has developed a base-rating plan in many markets. Producers differ markedly in the seasonality of their production. Some are fairly even suppliers, but others supply large quantities at one period and small quantities at others. The quantity of milk which can be sold as class I milk, however, does not vary greatly. In consequence the quantity of milk to be disposed of in the lower priced uses or the "surplus" varies greatly throughout the year. If milk is paid for on a classified price basis, there is a considerable variation in the average price received. Not all producers are held to be responsible for this "surplus," however. The even producer is producing milk approximately in accordance with the requirements of the fluid milk trade, while the uneven producer may be considered as producing a considerable surplus at times. The base-rating plan consists in allocating to each producer in the market a particular share of the higher priced market as a base, and for which base milk he receives a high price, with any milk in excess of this base paid for at a "surplus" or lower price. The even producer with a large base under such a plan will receive, therefore, a uniformly high price throughout the year, while the uneven producer or one with a small base relative to his production will receive a fluctuating price for his milk.

HISTORY OF PUBLIC REGULATION OF MILK MARKET

The powers of a State agency were first used to establish milk prices in early 1932. In January of that year the producers and distributors of market milk in the San Francisco market requested the director of

agriculture of California to aid them in the stabilization of resale prices in that market. The director acted under an act of the California Legislature passed in 1916. This law gave the director power to act as adviser in assisting producers and distributors to improve the efficiency of marketing farm products. It also provided that the director might act as an arbitrator in cases of controversy between producers and distributors. A milk trade board, composed of producer and distributor representatives, was formed in San Francisco in early 1932. This board immediately put uniform purchasing and resale price schedules into effect and these were maintained during the remainder of the year. Similar boards were organized in several other California markets.

In November 1932, the Wisconsin Department of Agriculture and Markets issued an order covering the marketing of fluid milk in the Milwaukee market. This action was taken under broad powers for the regulation of unfair competition and unfair trade practices, not under specific legislation for the regulation of milk markets. Under this authority, the department ruled that the bargaining of producers and dealers set standards of fair competition and fair practices. When producers and dealers handling 90 percent of the milk in a market agreed upon a marketing plan and upon prices, it was declared to be unfair competition for others to operate under any other plan or to buy and sell milk and its products at lower prices. In Wisconsin, as in California, early attempts by State agencies to aid producers of fluid milk were made under legislation not passed specifically for this purpose.

During 1933 other States enacted legislation specifically providing for State regulation of fluid milk marketing. The New York law, the first of these to become effective, was approved April 10, 1933. States as widely separated as New York, Oregon, and Florida enacted such legislation during 1933. The Federal Agricultural Adjustment Act, approved by the President on May 12, 1933, provided legislative authority for Federal regulation of fluid milk markets in which there is interstate commerce. This authority was continued in the Agricultural Marketing Agreement Act of 1937.

Since 1933 other States have provided for State regulation of fluid milk marketing. At some time in the past 7 years half of the States have had such legislation on their statute books. In several of the States the operation of these laws has been terminated through expiration of time limitations, as in Ohio, or because they have been declared unconstitutional, as in Washington, Maryland, and, recently, in Utah. About four-fifths of the States which have ever established State regulation of fluid milk marketing still retain it in some form, and in the summer of 1940 regulation was in force in 20 States.

OBJECTIVES OF MILK CONTROL

The chief objective of public regulation of the marketing of fluid milk has been to increase the income of certain groups of producers over what it would have been without such regulation. This purpose is the opposite of the objective of regulation of public utilities, which is designed to protect consumers. It must be recognized, however, that the situation with respect to the production and sale of fluid milk is very different from that which prevails in markets served by public

utilities. A principal feature of this contrast is that fluid milk is produced by a large number of independent producers, while in the public utility industries a single producer ordinarily supplies the entire market.

In public utilities the producer distributes his product to the consumer, and the typical situation is sale of the service by one firm to a multitude of consumers. In milk a large number of producers sell to a few distributors, who, in turn, sell to a great number of consumers. Or, on the producers' side of the market, there may be one or more cooperatives plus a number of nonmember producers. In the absence of Government limitations or a strong cooperative organization of producers having cordial relations with the distributors, entry into milk production is easy, while entry into public utilities is much more difficult because of the very large capital requirements. In most instances of public control of milk markets, the major aim has been to keep up the prices paid to producers by distributors. Where minimum retail and wholesale prices have been fixed, this has usually been done in order to protect minimum prices for producers by preventing retail price cutting, which has often led to producer price cutting. Producer groups have at times supported minimum wholesale and retail prices as a means of assuring that distributors will receive the income necessary to pay producers established prices. Maintenance of an adequate differential, or even a high margin, between retail prices and producer prices may also be an end in itself where large distributors can exercise sufficient influence on legislation and its administration.

It should be noted that consumers are rarely represented directly on the agencies engaged in the State regulation of fluid milk markets. In the Federal regulation of milk markets, the Consumers' Counsel of the Department of Agriculture does participate in public hearings, at which evidence from all parties concerned is heard, and advises the Federal administrator on the merits of each case as it affects consumers.

Two secondary objectives of price control should be noted. One is equalization among producers of the higher returns from the sale of fluid milk as compared with returns from milk used for manufactured dairy products. Milk control authorities would doubtless raise the price of milk regardless of the use to which it was put, if means of accomplishing this could be devised. Raising the prices of milk for all uses would require regulation beyond the boundaries of local milksheds from which fluid milk is now provided. Near most fluid milk markets there are producers who are selling milk for manufacturing purposes who could shift to the fluid milk market. Consequently, in the absence of Nation-wide control, methods of sharing the higher prices for fluid milk with these producers must be devised or means of excluding them from the fluid market must be invoked. Various means have been used to limit entrance of new producers into a given milk market.

Another secondary objective is improvement in the efficiency of milk distribution, although unfortunately this has not always been realized. Reduction in the costs of distribution may be a byproduct of regulation—as some of those charged with the administration of the Federal program have hoped—or it may be incorporated as a part of the program, as in State regulation of milk markets in California. The removal of price competition by setting minimum retail and wholesale prices sometimes stimulates increased expenditures for selling ef-

forts, such as advertising, special milks, and distribution containers. In both the Federal program and the programs of most States, increased efficiency of distribution appears to be either distinctly a secondary objective or an activity with which the program is not concerned.

MECHANISMS AND STANDARDS OF REGULATION

The principal mechanism for regulating fluid milk markets has been the fixing of minimum prices which can legally be paid producers for milk. As already indicated, these prices vary with the use to which the milk is put, the highest prices being established for milk used as bottled milk and lower prices for milk used for manufactured dairy products. There are two bases for these so-called classified prices. One is the fact that in most markets at most times there is more milk available than can be sold as bottled milk and bottled cream, the other is the belief that a reduction in the price of bottled milk does not result in a sufficient increase in the volume of sales to offset reduced income from lower prices. Thus, it is contended, income can be maintained only by continuing existing prices and differentials between bottled milk and milk for other uses. Effective prices for milk for use as dairy products are influenced by the market situation for these products, which, in contrast to bottled milk, are priced at a level that will result in the sale of the total production, often in highly competitive markets.

Since all milk available for use as bottled milk cannot be sold as such at the prices established, means must be provided either for limiting the number of producers permitted to sell milk for use as bottled milk or for distributing the income from the sale of bottled milk among all producers able and anxious to produce such milk. Limitation of the number of producers allowed to sell milk for fluid use is approached under the quota system, such as is used in the Portland, Oreg., market. At the other extreme, free entry to the market is permitted under certain recent Federal orders. (Local health regulations may, however, limit entry.) Where free entry is permitted, and even where entry is restricted, some method of distributing the receipts from the sale of the higher priced bottled milk must be invoked, since perfect balance of consumption and production of bottled milk is never attained. This usually takes the form of "pooling," either with or without a base-rating plan, as described above.

Other market control mechanisms which may become increasingly important are checking and auditing the books and records of cooperative organizations and of distributors and the supplying to producers of information relating to the operation of the market.

Since public regulation results largely from attempts of the various groups in the market to maintain positions previously established, it would be expected that past conditions would largely provide the standards used in fixing prices and market conditions under regulation. This concept is written into the Federal legislation, which declares it to be the policy of Congress to reestablish prices to farmers at a level that will give agricultural commodities a purchasing power equivalent to that which prevailed in the base period. State milk control legislation is generally less specific in setting standards than

is this provision of the Federal law. The fixing of retail and wholesale prices by the State agencies and especially the fixing of retail prices for stores sales at the same level as for home delivery suggests that regulation is based upon standards which tend to maintain past positions of producers and distributors. An examination of regulation in several States, however, reveals marked differences in standards and mechanisms used.

RESULTS OF REGULATION

Although the Federal Government and several of the States have regulated the marketing of fluid milk for over 7 years, it appears that neither the objectives, the mechanisms, nor the standards of regulation have become fixed. The Federal program is still evolving, and recent developments in the Chicago and New York markets may result in a considerable reorientation of emphasis.

To date the chief result of regulation, both State and Federal, appears to have been somewhat higher prices for fluid milk and probably somewhat higher incomes for a selected group of producers who were able, under the regulations established, to sell milk for use as fluid milk and cream on the regulated markets. This was the chief objective of the legislation. The higher income to farmer-producers of fluid milk has come primarily from the consumers, who have paid higher prices.

In supporting the position of the producers of milk for fluid use, regulation has apparently had a tendency to maintain the position of established distributors. This is especially true where resale prices have been fixed and differentials between store and home delivery have been eliminated.

While these have been the chief results of regulation to date, it may later be possible that regulation of fluid milk markets can be used to improve greatly the efficiency of operation of the milk markets. Indifference of consumers as compared with the activity of producers and distributors adds to the difficulties of administrative agencies in accomplishing this objective of greater efficiency and reduced costs of milk production and distribution.

CHAPTER I

FEDERAL PRICE FIXING IN MILK MARKETS ¹

INTRODUCTION

The Federal program of price fixing is best understood in a historical perspective. It has evolved from a series of experiments and trials in market operation and from these certain limitations and possibilities have become fairly well crystallized. The evolutionary process continues and will undoubtedly result in additional changes but the path followed in arriving at the present position is worthy of emphasis.

The stated purpose of the original Agricultural Adjustment Act and its subsequent versions has been to raise the prices to the producers of agricultural products. The original act declared it to be the policy of Congress—

(1) To establish and maintain such balance between the production and consumption of agricultural commodities, and such marketing conditions therefor, as will reestablish prices to farmers at a level that will give agricultural commodities a purchasing power with respect to articles that farmers buy, equivalent to the purchasing power of agricultural commodities in the base period.

The price-raising features of the act have naturally occupied a dominant position in the minds of the administrators of the provisions of the act. However, there has always been a considerable group in the Administration who have felt that not only such obvious devices as decreed prices and various direct actions such as production controls might be employed, but also, in the case of the marketing agreements, licenses, and orders at least, the opportunity of making improvements in the marketing machinery might be grasped. The balance between the groups in the fluid-milk field who have viewed the problem solely in terms of price-raising measures and those who have viewed the situation as an opportunity for market reform have varied, but groups holding each view have been present in the Administration at all times. The program is thus to be viewed not only in its accomplishment in the direct raising or establishment of prices by the various devices employed, but also in the extent to which it appears to have improved the operation of the various markets.

The first vehicle for entrance of the Federal Government into the field of price fixing in milk was provided by the original Agricultural Adjustment Act of 1933. The Secretary of Agriculture was given two procedures, the marketing agreement with the handlers of the product and the licensing of handlers of products, when these handlers were engaged in handling products of interstate commerce. The provisions were as follows:

SEC. 8b. (2). After due notice and opportunity for hearing, to enter into marketing agreements with processors, producers, associations of producers, and others engaged in the handling of any agricultural commodity or product thereof, in

¹ This chapter was prepared by Warren C. Waite.

the current of or in competition with, or so as to burden, obstruct, or in any way affect interstate or foreign commerce * * *. (3) To issue licenses permitting processors, associations of processors, and others to engage in the handling, in the current of interstate or foreign commerce, of any agricultural commodity or product thereof, or any competing commodity or product thereof * * *.²

There have been subsequent changes in the legal framework which was provided the administrators of the program. The changes have been largely for purposes of clarification of the acceptable means of operation and improvement in legal status of the program, and the essential philosophy and general mode of operation has been influenced only slightly by these changes.

The general historical features of the Federal participation in the fluid milk marketing field are shown in chart 1 and are given in detail in the appendix. Several fairly distinct periods appear at once. The first is that of the original 15 marketing agreements terminated on February 1, 1934. In time this is a relatively short period but one of great importance in experience for the Dairy Section and in the formulation of a general policy with respect to milk markets. The termination of the agreements marked an abrupt change from the previous policy. The following period was one of rapid expansion with licenses and the number of markets involved reached a peak toward the close of 1934. Thereafter there was a gradual contraction in the number of markets already under license and a period of inactivity occasioned largely by an uncertain legal status. Subsequently the legal position was improved by changes involving a shift to marketing agreements and orders, and some legal decisions have recently clarified the status of the program, with the result that lately another period of expansion appears to have begun.

THE FIFTEEN MARKETING AGREEMENTS

Requests for the utilization of the provisions of the Agricultural Adjustment Act in the fluid milk markets was immediate. The same day that the act was signed by the President, May 12, 1933, groups appeared in Washington from the Chicago milkshed and presented the Secretary of Agriculture with a definite proposal for a marketing agreement for that market. It was not possible to put the Chicago agreement into effect until August 1, nearly 2½ months later. Many decisions regarding policy and legality had to be decided, and the proposed agreement was redrafted many times. In the meantime groups from many other markets were pressing for agreements. It is estimated that there were more than 100 proposals from markets in 30 States by the middle of September and that by December there were fully 200.

The Chicago agreement as finally worked out was not long, approximately four printed pages, but it was supplemented with four detailed exhibits specifying prices to be paid producers, rules for the control of basic production, a schedule of fair trade practices, and an extensive schedule of prices to be charged by distributors for wholesale, store, and retail trade. The agreement bound the signatories to observe the marketing plan and to observe the schedule of prices provided in the agreement and the exhibits. The license issued at the time of the beginning of the operation of the agreement was a blanket license covering all dealers in the market whether parties to the agreement

² Agricultural Adjustment Act, Public, No. 10, 73d Cong., 48 Stat. L. 31 (1933).

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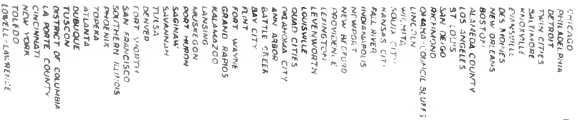
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or not. It was designed to impose the provisions of the agreement upon those who were not parties to it and who would not become such voluntarily.

The Chicago agreement embodied principally the ideas of Dr. Clyde L. King, the first Chief of the Dairy Section. Dr. King was a man of wide and long experience in the problems of milk marketing and had had an extensive experience in settling disputes arising in these markets. He was keenly aware of the groups who had occupied dominant positions and who could be brought to a general agreement and likewise of the smaller recalcitrant groups who made it difficult to carry through the agreed programs. He saw in the agreements a device to force this troublesome minority into line with the wishes of the majority of the market.

The Chicago agreement served as a model for the 14 subsequent agreements, appearing at fairly regular intervals during the remainder of 1933. The general policies embodied in the agreements are difficult to determine but appear to have included the following:

1. It was the avowed policy of the agreements to raise the prices received by producers. The early press releases stress these advances. For example, the press release of October 13, 1933, announcing the Alameda County agreement, states that "under the agreement the price to the producers is advanced from 51 cents to 58 cents per pound butterfat." Similarly the New Orleans press release of October 27, 1933, states: "The general result of the price schedule is to advance the price to consumers 93 cents per hundredweight and give the producers an increase of \$1.15." The extent to which these increases took place is indicated in table 1, which was prepared by the Dairy Section as a part of one of their briefs. It will be noted that a considerable increase in producer prices is claimed for all markets in which agreements were instituted.

TABLE 1.—Comparison of resale milk prices and dealers' margins during interval preceding agreement and while resale price fixing agreements were in force¹

	Interval preceding			November to December, 1933		
	Dealers' sale price per quart	Producers' share f. o. b.	Dealers' margin	Dealers' sale price per quart	Producers' share f. o. b.	Dealers' margin
Chicago.....	9	3.9	5.1	11	5.3	5.7
Philadelphia.....	9	4.4	4.6	11	6.0	5.0
Detroit.....	9	3.1	5.9	10	4.0	6.0
Twin Cities.....	6	2.1	3.9	9	3.7	5.3
Baltimore.....	10	4.7	5.3	11	5.6	5.4
Knoxville.....	9	3.1	5.9	11	5.2	5.8
Richmond.....	12	5.4	6.6	13	6.8	6.2
Boston.....	10	4.9	5.1	12	5.5	5.5
Oakland.....	11	4.3	6.7	11	4.9	6.1
St. Louis.....	10	3.0	7.0	11	4.3	6.7
New Orleans.....	10	3.1	6.9	12	5.2	6.8
San Diego.....	10	4.2	5.8	11	5.2	5.8
Evansville.....	10	3.4	6.6	10	3.8	6.2
Des Moines.....	8	3.0	5.0	10	4.2	5.8
Los Angeles.....	8	2.5	5.5	11	4.4	6.6

¹ Brief by A. A. A. concerning H. R. 8988, signed by A. H. Lauterbach, May 18, 1934.

There was some recognition that these higher producer prices, especially if distributor margins were sustained, would mean larger expenditures by consumers. This was not considered especially serious by a considerable group who believed at this time that the accompany-

ing measures instituted as a part of the program of the New Deal would shortly lead to a recovery in which the consumers would not only be able but also willing to pay parity prices to the farmer.

2. The agreements in general followed the pattern of the Chicago agreement in specifying single retail prices for the various commodities. There were some modifications; in Knoxville, New Orleans, Boston, and Des Moines both maximum and minimum retail prices were specified with a range of 1 cent, while in Baltimore a maximum but not a minimum price was provided. The notion appears to have been that in order to insure success of the agreements and thus improve returns to producers it was necessary to start with the maintenance of prices to distributors sufficiently high to yield them reasonable returns. The immediate problem was felt to be the raising of farm income by any available means and hearty cooperation of dealers was sought by maintaining or improving their situation. If the margins should subsequently turn out to be excessive there would later be plenty of time to secure a narrowing of them. The resale price provisions were also looked upon as a means of eliminating the small fly-by-night distributor who maintained himself by selling below the prevailing market, even though he were not a low cost or efficient distributor but because he bought milk from producers at prices below those customarily paid by the large distributors. Such an operator had always been looked upon as a disturbing element by the majority of the market. Examination of table 1 indicates that the A. A. A. widened or maintained margins in 9 of the 15 markets, and in the other 6 the margins decreased.

3. The market was to have a large degree of local control. The mechanism for the execution of the provisions of the agreement and license were not especially clear. The idea seemed to be that the markets would run themselves as they had done previously but with the Federal Government now to force any comparatively small minority to the will of the majority. The Chicago agreement, for example, contained the following provision:

(11) The contracting producers and contracting distributors shall use their best efforts to assure the observance of the terms and conditions of this agreement by such producers and distributors. Subject to such regulations as the Secretary may prescribe, the contracting producers and the contracting distributors shall establish such agency or agencies as are necessary to (a) receive complaints as to violations by any contracting producer or contracting distributor of the terms or conditions of this agreement, (b) adjust disputes arising under this agreement between contracting producers and/or contracting distributors, (c) make findings of fact which may be published, (d) issue warnings to such persons, and (e) take such lawful measures as may be appropriate; and such agency or agencies if it or they deem it necessary, shall report its findings and action with respect thereto to the Secretary for appropriate proceedings under the act.

Provision was made in several markets for a board representing producers, distributors and the public, but in only one market, Detroit, was such a board ever actually formed. George N. Peek, then Administrator, announced as late as November 1933 that "Local self-government and regulation of metropolitan milk shed areas under the power of the Agricultural Adjustment Act as long planned by the Dairy Section of the Agricultural Adjustment Administration is now coming into use."³ Moreover, at one time there was a skeleton outline of a plan for regional as well as national bodies to function in control.

³ Press release of November 7, 1933.

4. The cooperative in the market was to be supported. Despite the belief in the permanence of the Federal program on the part of its administrators, the risk was always present that it might sometime be withdrawn. Hence it was thought essential that the existing producer organizations be supported, otherwise the producers would find themselves in a worse position than if the Federal Government had never entered the market. The difficulty was that the Federal Government now performed through its operations some of the previous functions of the cooperative, especially with respect to price. The cooperatives had supported themselves with deductions from the milk checks of their members. If now all in the market were on a similar basis, whether member of the cooperative or not, actual disadvantage would accrue to the cooperative membership because of its additional charge and the cooperatives were fearful of loss of membership and prestige. There was in consequence included in the plan a check-off or deduction from the milk of the noncooperative member producer as well as the cooperative member producer, and the deduction for the nonmember of the cooperative paid to the governing body or some other designated agency of the market under the assumption that that body would perform services for this producer which he would have received as a member of the cooperative.

5. All producers in the market were to have equal access to it. This led first to a geographic specification of what constituted the producing area of the market and only milk from this designated area was eligible for sale. In establishing these areas the boundaries of the existing milkshed were considered and there is no evidence that any important group of producers were cut off and in many cases the designated area exceeded the then existing milkshed. Secondly, it was recognized that high prices would lead to expanded production and there was provision for some form of the base-surplus plan in all the markets except the Twin Cities and Des Moines. New producers in the designated area could enter the market under the handicaps usually incorporated in markets with base-surplus plans. Finally, to insure equal prices to producers in most of the early agreements there was provision for an equalization fund. This was a scheme for distributing the returns to producers so that all of those with the same base ratings received the class I price for the same percentage of their base ratings regardless of the dealer to whom they sold their milk. All producers similarly situated were thus to receive the same price for their milk, except for transportation differentials.

6. The same price for milk was to be charged in stores as for wagon delivery. The problem of whether it was desirable to have a different price for the milk delivered consumers from the wagon and from the store has long been a moot question in the dairy industry. The large distributors, their labor force and the cooperative were generally in favor of no differential since the same wagon-store price served to maintain their status in the market and, incidentally, to give stores a wider profit margin. There had been an extensive growth of wagon-store differentials throughout the country during the depression period,⁴ and in several of the markets where agreements were instituted the differential was so firmly fixed it could not be eliminated at once. In these markets it was retained or lowered whenever possible.

⁴ It is stated by milk distributors' organizations that milk was used as a "loss leader" in some States in some areas.

From the very beginning there were violations of the provisions of the licenses. Most of these violations related to the resale price provisions. The legal section displayed great hesitancy in bringing these cases to court, evidently feeling that they were on uncertain ground and that a loss of cases in this field might jeopardize other programs. The signatories to the agreement were without doubt bound by its provisions, but whether the same conditions could be imposed on the non-signers simply through the provisions of a license was a different question. Much legal opinion held that the provisions could not be the same. To hold that the licenses and the agreement could be the same was to maintain that Congress could give an anticipatory approval on an action yet to be decided upon by a local group and force nonagreeing parties to its acceptance. Much of the subsequent change in the procedure followed has been to avoid this legal difficulty.

The desirability of establishing both minimum prices to producers and resale prices by distributors soon became a point over which there was a sharp division of opinion. An increasing group held that by so doing the administration became a party to the maintenance of margins by distributors that were excessive, and that the consumers' interests were not sufficiently protected. Some of the producer groups apparently felt that high prices could not be maintained without the active support of the distributor groups, which was to be purchased only by adequate protection of their margins. The issue became acrimonious as evidenced by Secretary Wallace's statement of December 31, 1933. "The issue seems clear, I have publicly stated my position that we should use the powers of Government under our act to lift farm prices, not distributors' prices. Mr. Holman for the first time has publicly stated his position, which is that we should enforce distributors' resale prices.

"To our knowledge the profits of some milk companies, including subsidiaries of big holding companies are exorbitant to say the least."⁵

Formal recognition of the difficulties came with the calling of a group of outsiders into consultation in January 1934 and the announcement of a change in policy was made in the following telegram sent to all markets in which agreements were in effect on January 8, 1934:

The Agricultural Adjustment Administration advises you that changes in policy respecting milk shed marketing agreements announced today will not disturb your present situation until informal conferences with your representatives and other parties to the contract or local public hearings are held relating to proposed changes desired to make your agreement conform to the newly adopted plan. Meanwhile the administration will exert every effort to sustain the present marketing agreement prices to producers on your market. Concen-

⁵ Press release, December 21, 1933.

The Milk Industry Foundation, in a memorandum of November 29, 1940, to the Bureau of Labor Statistics, has submitted reports for subsequent years on the net profits of milk distributors, which, it is stated, show comparatively small returns in certain areas, as follows:

"State of Connecticut, Federal Trade Commission, January 8, 1936, H. Doc. No. 387, p. 62: Net profit from operations, 1.9 percent.

"Baltimore, Cincinnati, St. Louis, Boston, Federal Trade Commission, June 4, 1936: Net profit from operations, 2.6 percent.

"Wisconsin, Wisconsin Department of Agriculture, October 21, 1939, Journal of Assembly, p. 3166: Profit 2.33 percent.

"Philadelphia, Federal Trade Commission, January 8, 1936, H. Doc. No. 387, p. 68: Net profit from operations, 4.8 percent.

"West Coast, Lybrand, Ross Bros. and Montgomery, C. P. A., November 18, 1937, The Distributors' Milk Dollar, Pacific Slope Dairy Annual, p. 4: Profit, 1.3 percent.

"New York City, N. Y., Department of Agriculture, January 24, 1938, Legislative Document No. 100, 1938, p. 6: Profit, 2.98 percent."

tration of future efforts will be upon establishment and maintenance of proper prices to producers as each market warrants without attempting hereafter to establish or enforce complete schedules of distributors' prices to consumers. In doing this, proper balance will be kept in mind between fluid milk prices and the prices of butter, cheese, and other competing dairy products so that the final price to producers will be easier to maintain on an equitable and lasting basis. However, steps will be taken to protect the market against unfair competitive practices and in some cases definite minimum price levels will be established below which resale by distributing agencies will not be permitted in order that the whole market structure will not be endangered. Greater local responsibility and wider local representation than heretofore will be sought in drafting future agreements and in proposals to modify existing ones. Now that you are advised of the proposed new policy and our desire to modify your agreement by degrees to conform to that change we welcome suggestions from you and other parties to your agreement as to your desires respecting informal conferences or hearings in light of conditions now obtaining on your market.

The agreements were formally terminated on February 1, 1934, but the licenses were allowed to remain in effect until subsequent replacement by new licenses could be undertaken.

This new position was bitterly assailed by the National Cooperative Milk Producers' Federation and certain of the distributor interests. The Federation at its March meeting drew up resolutions demanding:

The immediate reinstatement of the old marketing agreements and supporting licenses in every market in which such agreements and licenses were canceled by the Secretary of Agriculture, if a majority of the milk industry in the market so desire. We also demand the right to have marketing agreements and licenses of the old type placed in effect on every other market where a majority of the industry request such a marketing agreement and license.

(Removal) of those * * * in the Department of Agriculture and in the A. A. A. who have so unequivocally demonstrated their inexperience, inability, inefficiency, and ineptitude in dealing with the fundamental problems facing our dairy farmers and who have attempted, and are attempting to impose upon the dairy cooperatives of this country arbitrary controls and alien principles which, if long continued, will obstruct the cooperative marketing movement in the dairy field and hinder the recovery of agriculture.⁶

There was also introduced the Feisinger bill (H. R. 8988) which would have required the Secretary of Agriculture to fix retail prices, and to delegate large powers to local control committees. The A. A. A. actively opposed its passage and after a series of conferences between its supporters and administrative officials pressure for its passage was relieved.

THE LICENSE PROGRAM IN THE MILK MARKETS

The licenses in the markets under agreement which had been retained in their old form were replaced by licenses embodying the new procedures as quickly as possible. There was also a rapid extension of activity to additional markets and by the end of 1934 there were some 50 markets under license. This marked the peak of governmental activity in the milk field with respect to total number of markets included in the program. With the change in the character of the program there also came a change in the leadership of the Dairy Section. Mr. J. H. Maion of the Des Moines Cooperative Dairy Marketing Association became Chief for a few months and was followed by Mr. A. H. Lauterbach who had been head of the National Cheese Producers Federation. Both of these were men of long experience with producer organization and favored an extension of the

⁶ John D. Black, *The Dairy Industry and the A. A. A.*, p. 131.

expected benefits of the licenses to producers as rapidly as possible. The bitterness with which the change in policy had been attacked also probably resulted in a desire to extend activities and demonstrate that the new policy might be of benefit to a wide group of milk producers. The principles as outlined in the telegram of January 8, 1934, to the markets then under agreement were followed in general, but later some modifications developed. Certain changes in general policy from that followed in the agreements may be noted.

1. There were no resale prices specified in the licenses except in rare cases. The single price specifications related to the prices to be paid producers for their milk, usually class II as well as class I prices and sometimes class III prices. In some markets where special circumstances prevailed, as for example sale of a large amount of milk by producer-distributors, minimum resale prices were introduced for their protection. The view now adopted seemed to be that the distributors were able to look after their own interests adequately and that a price war or intensified dealer competition would be beneficial provided producer prices were maintained.

2. The level of prices aimed at in the license was distinctly lower than that sought under the agreements. Prices now were to be kept more closely in line with those of butter and other dairy products. The parity prices of milk designated by the act were now to be sought through development of a production control program designed to raise the prices of all dairy products together with a concomitant rise in fluid milk prices; rather than through the mere raising of fluid milk prices with the expectation that prices of butter and other dairy products would subsequently rise, which had been the earlier policy. Until the production control program could be established fluid milk prices were to be set close to their competitive relations with prices of butter and other dairy products. This policy was at first scrupulously adhered to. Proposed prices were tested by computations on the past relationships of class I milk to the prices of butter and other processed dairy products and to past relationships of class prices in the market. Computations were also made by adding to the value of milk for manufacturing purposes at the edge of the milk shed various estimates of additional requirements for sanitation, transportation and so on. The press releases for the licenses early in 1934 stress that the new prices are at competitive levels. For example, the press release of February 10, 1934, states for Des Moines, "the price is declared to be substantially in line with competitive conditions." Similar announcements were made for other markets.

Two factors operated to modify the strict application of this policy to an extent the exact amount of which is incalculable. In the first place the general production control program for all dairy products failed to develop and the expected consequent rise in fluid milk prices likewise failed to take place. There was also a considerable drought which developed in the summer of 1934 necessitating amendments to the licenses in the way of price increases. Producers, of course, were not interested simply in competitive prices and there was constant pressure for higher prices and undoubtedly there was a drift from the ideal of purely competitive prices, although the administrators have kept a constant eye on this level and have endeavored to keep close to it.⁷ Pretty generally it has proven impossible to keep

⁷ The method of computation for the so-called "competitive prices" is indicated on p. 85.

a milk producer out of a market when he can sell milk at a lower price than those already there and milk production is his most profitable alternative. If high prices are established in a market, forces are put in motion tending to expand supplies in that market either by the entrance of new producers or expansion of production of old producers with subsequent pricing difficulties and lowered returns to producers. In short, the prices cannot be maintained for any considerable period. The competitive price envisaged was, however, a sort of long-run normal competitive price. If a temporary situation drove prices to a low level, then there was no hesitancy in raising prices to a level which was thought would be more usual in the long run. The price now sought was thus one which it was felt could be maintained and it was felt that, in the absence of limitations on production, any price departing far from a competitive level, that is, a price that would normally prevail without Government interference, would be impossible to maintain, even under Government regulation, without strong legal and police backing. Black concludes on a review of this period—

As a matter of fact, of course, the prices written into the new licenses were not put upon a competitive basis even before the production control plan was dropped. Too much opposition to the policy arose from producer interests, and the price finally agreed upon was usually definitely above the competitive level. * * *

* * * A review of prices in 42 licenses in September, 1934 had showed that nearly all were above a competitive level, although some only by small amounts. The average for the 42 markets was at least 30 cents above and possibly as much as 45 cents.³

It is safe to say, however, that the prices were much closer to competitive levels than they had been under the agreements.

3. With the appearance of the new licenses there was an important revision of the control incorporated over the operation of the market. A market administrator became an integral part of the market operating it for the Secretary, rather than having the Secretary give a blanket approval to anticipated actions of a local governing group. The new license provided that—

SECTION E. The Secretary shall designate the market Administrator who shall perform such duties as may be provided for him in the License. The Market Administrator as designated shall be subject to removal, at any time, by the Secretary.

The market administrator was to be paid by deductions from distributor payments due producers. The controls thus took on a more frankly Federal administrative aspect.

The market administrator made calculations regarding the prices to be paid for the lower classes of milk, managed the equalization pool where there was one, and generally was charged with admitting new producers to the market in cases of emergency. A representative of the Licensing and Enforcement Division was also present in the market to deal with violations of the terms of the license. The task of finding competent administrators for such a large number of markets in a short time proved impossible, and it remains somewhat of a problem even at the present time.

— 4. There was no longer a delimitation of the milk shed in the old geographic sense. If prices were to be kept at or close to competitive levels there would be little reason, of course, for new producers to enter the market and then no need to set up strong walls to keep them

³ John D. Black, *The Dairy Industry and the A. A. A.* pp. 123 and 144.

out. New producers were now generally permitted to enter the market after some probationary period. The probation arrangement in general use in 1934 required each new producer to sell his milk at the lowest class price for several months and was intended to keep producers from shifting in and out of the market rather than as a permanent bar to entry.

5. There was an effort to secure a complete accounting and auditing of all transactions in the market and an increased attempt to insure the fulfillment of obligations and contractual agreements in the market. An attempt was made to bond dealers to insure payment to producers for milk bought. The books and records of operation of the distributors were also open to scrutiny by the administration. This has constituted an important contribution to equity in the market, since one of the faults in an unregulated market is the prevalence of much under payment to producers through mis-reporting of utilization and other incorrect reporting. An example of the extent to which this may occur simply through mistakes in a market under regulation where such practices, if intentional, could hardly be expected to escape notice is found in the summary of the audit adjustments in the Boston market found necessary during the period from March 16, 1934, to July 31, 1936.

As indicated * * * audit adjustments, arising from failure of handlers to report correctly their class utilization of milk, are very important, from the standpoint of insuring that handlers pay the total use value of their milk in accordance with the classified price plan specified in the order. * * * during the entire period studied, debit adjustments of this type amounted to \$155,607.52, and the net balance of debits amounted to \$82,674.86, the net amount which handlers would have underpaid producers in the absences of audit of their records.⁹

6. The protection extended to the cooperatives under the agreements was continued in the licenses. Two deductions were made from the price paid producers for milk. The first was a deduction for market administration to cover the costs of the market administrator's office and was paid to the market administrator. The second was a deduction for market services. Where there was a cooperative in the market the deduction from the price paid for the milk of members was remitted to the cooperative, while the deductions from the price paid for the milk of nonmembers of the cooperative was paid to the market administrator. In return for this latter sum the market administrator was to provide the nonmember with services comparable to those supplied by the cooperative to its members.

As the expansion in the number of markets under license continued increasing difficulties developed through violations. The Legal Section and the Department of Justice proceeded with considerable caution and there were a number of adverse court decisions, especially of the interpretations of interstate character of the milk. The trend of judicial decisions on interstate commerce has been a serious limitation to the ability of the A. A. A. to carry through its program. If the markets were limited to only those having a considerable volume of actual interstate milk then the extent of the program was limited and probably only large markets near the borders of States could be included. Markets within States would be outside the program even though they differed from an included market by the accident of where a State line may have fallen. The Dairy Section tried to extend its

⁹ E. S. Harris and O. M. Reed, "The Audit of Handlers' Records in Connection with Federal Regulation of Milk Marketing," U. S. D. A., Agricultural Adjustment Administration, Mimeo., December 1937, p. 5.

claim to jurisdiction by the argument that even though no milk was received in the market it is nevertheless influenced by and influences the price-making forces which are Nation-wide. It is well known, of course, that the fluid milk consumption in a market influences the amount of cream separated and the milk used for manufacturing purposes and thus has effects upon the national markets for these products. The lower courts have rejected this argument.

The failure of legal action and adverse court decisions had important repercussions on enforcement in the markets. Complaints of violations were reported from 27 of the 50 licensed markets and orders were issued to "show cause" why the license of violators should not be revoked. There were 243 reported in Chicago alone and Boston, Los Angeles, Philadelphia, and St. Louis also reported many. Court litigation had involved 10 markets up to June 1, 1935, and there were pending 14 cases of which 7 involved the Boston market. The A. A. A. was forced more and more to depend upon the collaboration of the local groups in operating the market and securing compliance with the provisions of the license and less and less upon legal action. There naturally resulted a decline in activity in extending the licenses to new markets and a withdrawal from some of the old markets in which the situation was untenable. At the peak, from December 1934 to February 1935, there were some 50 markets under license, but a series of cancellations removed 16 licenses from the active list by July 1, 1935. Many of these involved places where the interstate character of the milk was under serious question such as Los Angeles, Fort Worth, Oklahoma City, Indianapolis and Baltimore. It was hardly worth while to expand activities under such circumstances and the Dairy Section chose to await clarification of the legal issues by the court and enactment of legislation strengthening its position.

MILK MARKETS UNDER ORDERS

The decision to secure clarification in the legal status of the program resulted in the amendments to the Agricultural Adjustment Act passed August 26, 1935. These were a compromise worked out in part with the milk producer association group, although they did not go as far as the latter had outlined in its own list of proposed amendments. These amendments specifically state the way in which the orders are to be issued, the procedures to be followed, and precisely the elements to be contained. This was to strengthen the legal position. The issue as visualized by the legal profession has been well stated by Prof. R. A. Maurer, and had occupied the attention of the Legal Section from the time of the first agreements:

Fixing of prices for the future is a legislative function, often described as quasi-legislative, and may be delegated to administrative agencies only subject to statutory limitations which the legislature itself prescribes. Therefore, it may be truthfully said that it is the legislative will which the administrative agency is actually carrying out, and not the will of the administrators. However, if a discretionary authority were vested in the public authority under defined statutory general rules, there would be no objection to an arrangement under which the producers and dealers submit facts and recommendations in an advisory capacity. The conclusions and requirements as to price would have to emanate from public authority in order to have the force of law and be taken as the legal basis for enforcement proceedings.¹⁰

¹⁰ J. D. Black, *The Dairy Industry and the A. A. A.*, p. 281.

The procedures worked out followed this line of reasoning. Thus the act states:

(3) Whenever the Secretary of Agriculture has reason to believe that the issuance of an order will tend to effectuate the declared policy with respect to any commodity or product thereof specified in subsection (2) of this section, he shall give due notice of and an opportunity for a hearing upon a proposed order.

(4) After such notice and opportunity for hearing the Secretary of Agriculture shall issue an order if he finds, and sets forth in such order, upon the evidence introduced at such hearing (in addition to such other findings as may be specifically required by this section) that the issuance of such order and all the terms and conditions thereof will tend to effectuate the declared policy of this title with respect to such commodity.

The local groups involved exercise a considerable control over the issuance of an order and the form which it will take. If the handlers of 50 percent of the volume of product have signed a marketing agreement which regulates the handling of the product in the manner specified for the issuance of orders, and if the Secretary finds two-thirds of the producers either by number or volume are in favor of the issuance of such an order, he may issue one. If two-thirds of the producers are in favor of a proposed order, and the Secretary and the President after a hearing conclude that an order is necessary to effectuate the purpose of the act, such an order may be issued. The Secretary is powerless to impose an order upon a market unless the producers supplying that market are in favor of it.

The provisions of the act as to the terms, market procedures, and practices which are to be included in the orders are essentially those customarily found in the large markets and already previously incorporated in most of the licenses. Milk is to be paid for on use-class basis by distributors. There is authorization for the equalization of all sales of milk within the market unless the producers of three-fourths of the volume coming to the market favor individual dealer pools. The Secretary is authorized to select an agency for the administration of the order and provide for the funds necessary for operation.

These legal specifications simply make formal the practices previously followed in providing a milk marketing plan for a specific market. Preliminary conferences are first held with the agencies involved in the milkshed to determine the nature of the plan proposed and whether it is a plan of the character to which the Government might become a party. The most important group in this consideration is the local producers' cooperative. At least since August 1935, and probably from the beginning, the A. A. A. has not gone into markets without urging from the dominant producers' cooperative in that market.

If the plan appears reasonable then a public hearing is called some place in the milkshed at which the proposal is discussed, parties are allowed to state publicly their views on this or any other plan and any additional information considered essential to the success of the proposal is secured. For this hearing an economic brief is prepared by the Dairy Section. This brief discusses the underlying economic factors leading to the belief that the proposed plan is equitable and desirable for the market. The brief is mimeographed and widely distributed before the meeting. The contents have now become pretty well standardized and usually contain the following:

Part I: A discussion of the economic conditions with respect to the milk producers in the market, which is designed to demonstrate that

these producers do not have a purchasing power equivalent to that which they had in the base period, August 1919 to July 1929, or that local conditions warrant a further price increase.¹¹

Part II: The character of the commerce in milk in the particular marketing area, disclosing the extent of the interstate movement of milk and cream to the market.

Part III: The supply conditions in the area furnishing milk to the market are presented. Such factual data as are available are assembled relative to such things as the location and boundaries of the area, the types of farming, the character of the herds, production and disposition of milk, feed prices, seasonal variations, and the organization of the supply.

Part IV: This section considers the demand situation. It is usually short and contains a discussion of the probable ability of the consumers to sustain the proposed prices without curtailing their purchases of milk.

Part V: A historical study of the past prices in the market.

Part VI: An explanation of the classification of milk and the prices of milk provided in the proposed plan.

Part VII: A statement of the conclusions relative to the minimum price set for payment to the producers in the new plan. It constitutes a short justification of the proposed prices.

Part VIII: A description of the provisions for an equitable apportionment of the proceeds from the sale of milk among all the producers of the market.

Part IX: Discussion of other incidental provisions of the proposed plan, such as the reports to be required, the provisions relating to the market administrator, the expenses of administration, and so on.

These briefs are quite voluminous, running from around 100 to 150 typewritten pages, with perhaps 35 or 40 tables of factual data.

Armed with the facts gathered at the hearing, the data of the economic brief and the discussions with important groups within the market, if it is then deemed desirable, the Dairy Section prepares a marketing agreement or order as the case may be. If the Secretary gives a tentative approval to this it is then sent to the field for acceptance or rejection by the producers. A referendum is then held among the producers and an acceptance or rejection of the proposal secured. If the producers signify acceptance of the order the Secretary issues the final order.

The general policies underlying the issuance of orders for the fluid milk markets remain essentially the same as those during the period of licenses (1934-35). The following features may, however, be noted:

(1) The primary purpose of the orders remains that of raising prices to producers. The amendments added in the Agricultural Marketing Agreement Act of 1937 as approved June 3, 1937, eliminate certain restrictions to these increases that had appeared in previous acts. Thus, the act of 1935 states:

SEC. 2. It is hereby declared to be the policy of Congress—(1) Through the exercise of the powers conferred upon the Secretary of Agriculture under this title, to establish and maintain such balance between the production and consumption of agricultural commodities, and such marketing conditions thereof, as

¹¹ Through the amendments of 1935, August 1919 to July 1929, or some portion of it, became the base period where satisfactory data were not available to the Secretary for the earlier base period.

will reestablish prices to farmers at a level that will give agricultural commodities a purchasing power with respect to articles that farmers buy, equivalent to the purchasing power of agricultural commodities in the base period; * * *.

(2) To protect the interest of the consumer by * * * (b) authorizing no action under this title which has for its purpose the maintenance of prices above the level which it is declared to be the policy of Congress to establish in subsection (1) of this section.

This specific limitation to the level of prices to be established in the orders has been eliminated and the Secretary granted much greater discretionary power by the 1937 amendment. The latter reads in part as follows:

(18) * * * The level of prices which it is declared to be the policy of Congress to establish in Section 2 and Section 8e shall, for the purpose of such agreement, order, or amendment, be such level as will reflect the price of feeds, the available supply of feeds, and other economic conditions which affect market supply and demand for milk or its products in the marketing area to which the contemplated marketing agreement, order, or amendment relates. Whenever the Secretary finds, upon the basis of the evidence adduced at the hearing required by Section 7b or 8c, as the case may be, that the prices that will give such commodities a purchasing power during the base period as determined pursuant to section 2 and section 8e are not reasonable in view of the price of feeds, the available supply of feeds, and other economic conditions which affect market supply and demand for milk and its products in the market area to which the contemplated agreement, order, or amendment relates, he shall fix such prices as he finds will reflect such factors, insure a sufficient quantity of pure and wholesome milk, and be in the public interest.

This latter amendment pretty largely removes what little protection the consumer had from high prices as a result of the Government programs. The criterion becomes more largely a matter of administrative judgment and not one of a definitely calculable limit. Without doubt circumstances arise in which higher than parity prices might be desirable for short periods because of special circumstances, but more than before the limitation on the price granted depends upon the fortitude and judgment of the administrators.

(2) The position of the producers' cooperative has actually been strengthened by the new legislation. In accordance with previous practice provision is made for deducting from the proceeds of producers not members of the cooperative, deductions (presumably equal to those of the cooperative) for marketing services as was the previous policy. Thus, section 5e reads:

Providing (i) except as to producers for whom such services are being rendered by a cooperative marketing association * * * for marketing information to producers and for the verification of weight, sampling, and testing milk purchased from producers; and (ii) for assurance of, and security for, the payment by handlers for milk purchased.

Much more important is the provision that in the referendum among the producers now necessary before the Secretary issues an order the cooperative is empowered to cast the entire vote of the membership, thus:

(12) Whenever, pursuant to the provision of this section, the Secretary is required to determine the approval or disapproval of producers with respect to the issuance of any order, or any term or condition thereof, or the termination thereof, the Secretary shall consider the approval or disapproval by any cooperative association of producers, bona fide engaged in marketing the commodity or product thereof covered by such order, or in rendering services for or advancing the interests of the producers of such commodity, as the approval or disapproval of the producers who are members of, stockholders in, or under contract with, such cooperative association of producers.

In most milk markets there will be a considerable proportion of the producers who are members of a dominant cooperative. Gaumnitz and Reed report from a study of the reports of the market administrators for all milk except producer-distributor milk:

In two markets for which data are available the percentage of total milk purchased from cooperatives was less than 50 percent; in four markets it was from 50 to 60 percent; in five markets 60 to 70 percent; in one market 70 to 80 percent; in nine markets 80 to 90 percent; and in five markets above 90 percent. It is rather well recognized that the cooperatives sell a significant portion of the total volume of milk sold to distributors in many markets not included in the figures given above, such as New York City, Philadelphia, Pittsburgh, Chicago, and Milwaukee.¹²

These proportions are thus sufficient in the majority of milk markets to give the cooperative veto power over any order which the Secretary may propose to issue. This is a principal reason why the Dairy Section so carefully canvasses the cooperative opinion before proposing a tentative order for the market.

(3) Entrance to the market is available under the orders to any milk producer who can find a dealer to whom to sell. The law specifically states:

(G) No marketing agreement or order applicable to milk and its products in any marketing area shall prohibit or in any manner limit, in the case of the products of milk, the marketing in that area of any milk or product thereof produced in any production area in the United States.

New producers, however, enter the market at some temporary price disadvantage, intended to restrict the market to regular suppliers:

5. (d) Providing that, in the case of all milk purchased by handlers from any producer who did not regularly sell milk during a period of 30 days next preceding the effective date of such order for consumption in the area covered thereby, payment to such producer, for the period beginning with the first full regular delivery by such producer and continuing until the end of 2 full calendar months following the first day of the next succeeding calendar month, shall be made at the price for the lowest use classification specified in such order, subject to the adjustments specified in paragraph (B) of this subsection (5).

This appears to mean that any restriction to the entry of producers into a market must be found in the older form of control by the cooperative or refusal of the health authorities to inspect farms or to qualify milk for sale in the market, except insofar as the payment only of low-class milk prices for long periods in itself constitutes a bar to market entry.

The revision of the legal procedure to that of orders did not at once clarify the situation and it was necessary to await court actions to determine whether the administration was on secure grounds before expansion in activities took place.

These uncertainties in the mind of the administration are indicated by the statement of F. R. Wilcox, Director, Division of Marketing and Marketing Agreements of the Agricultural Adjustment Administration, to the American Institute of Cooperation as late as July 1938.

The story of Federal milk marketing agreement programs in the Boston market is one of a series of appeals, motions, answers, decrees, petitions, and citations in which the court machinery has ground on and on for nearly 5 years. The present phase of the struggle has been continuous since October 1937, when the Government filed suit and was successful in obtaining temporary injunctions requiring the dealers to comply with the Boston milk order, and pay money due since last August under the equalization pool.

¹² E. W. Gaumnitz and O. M. Reed, "Some Problems Involved in Establishing Milk Prices," DM-2, Marketing Information Series, U. S. D. A.

When dairy farmers face an economic crisis, they must act swiftly. Long-drawn-out legal processes which fail to keep pace with modern economic needs are a threat to the individual dairyman's existence. Cows must be milked every day and cows must be fed every day. The ordinary dairyman cannot afford to wait 5 years to find whether or not his daily labor is going to be justified by a court decision. Until both the Government's position and the farmer's position are put on more solid ground, uncertainty and insecurity will remain in the operation of Federal milk marketing programs.¹³

The dairy cooperatives since they were necessarily instrumental in securing Federal regulation in the market were hesitant to have it attempted, since they felt that a failure to operate successfully weakened their position. The following viewpoint expressed by B. B. Derrick, secretary-treasurer of the Maryland and Virginia Milk Producers Association, Inc., illustrates the view held by many cooperatives:

We tried a Federal order in 1936. It operated for 15 days only to be stopped by an injunction instigated by 11 independent producers who had been inspired by independent distributors. The injunction put the association in a very embarrassing position. But we took the bull by the horns, signed up the distributors on a new contract, and went on without public control.

The United States Department of Agriculture appealed the injunction and litigation started. Exactly 16 months after the original injunction had been granted against the order, the A. A. A. received a decision from the Federal court of appeals that the order was all right and everybody should abide by it. By that time the dairy industry had forgotten all about public control. We were back where we started.¹⁴

The situation changed with considerable rapidity about the middle of 1939. Several favorable decisions by the Supreme Court upheld the powers of the Secretary to issue orders and the law as it related to milk. This resulted in strengthening the position of the Government in the markets where plans were already in operation and increased interest by producer groups in markets not then under a Federal plan. It now appears that the Dairy Section may again be entering a period of expanding activity. There is less tendency, however, to consider Federal participation as a panacea for the difficulties of the market and more recognition of its function in facilitating the adjustment and operation of the market.

In the last few years there has been some attempt at supplying milk free or at lower than prevailing market prices to the low-income group or relief clients. The experiment appears to have begun with sales of relief milk in Boston in October 1937. In this plan the Federal Surplus Commodities Corporation bought milk from farmers in the Boston milkshed and gave it to the department of public welfare which paid for the processing and bottling of milk and its delivery to the families on relief. This entry into the relief milk field was not entirely from altruistic motives. The Boston market was at that time involved in a problem in which several large distributors were refusing to abide by the terms of the order and buying their milk at other than the specified prices. One of the farmers' cooperatives found itself faced with the loss of a considerable portion of its market as a result and had difficulty in selling its milk for class I purposes. This resulted in a low net price to its members with a threatened loss of membership. The purchase by the Federal Surplus Commodities Corporation of relief milk from it enabled it to maintain a relatively large portion of its sales as class I milk and in consequence to pay a high price to its

¹³ F. R. Wilcox, "The Federal Marketing Agreement Program," in *American Cooperation*, 1938, p. 193.

¹⁴ B. B. Derrick, "Advantages and Disadvantages of Public Milk Control," in *American Cooperation*, 1938, p. 282.

producer members. The cooperative was thus enabled to maintain its existence and the Federal program in the market supported.

In addition to the defensive tactics which were provided the Secretary in the support of his order in the market, the actual operation of the plan turned out to be desirable from the viewpoint of the disposal of a larger quantity of milk at class I prices than would otherwise have been possible. A preliminary survey had shown that 45 percent of the relief families were buying no milk at all, and a considerable number of the remaining 55 percent were buying in very small quantities only. Families on W. P. A. were permitted to participate in the plan by paying the 2-cent cost of handling the milk. A surprising amount of milk was absorbed in the market without apparent influence upon the sales or price in the regular distributive channels. All told it is estimated that as many as 75,000 Boston families received free or 2-cent milk at some time under the plan.

The results of the original relief milk plan have led to the formation of plans in which milk is sold to a limited clientele at prices below the market level, with the major portion of the cost borne by the purchasers themselves. The present Boston plan was begun on August 7, 1939. The farmers are paid the standard class I fluid price for their milk of about 6.8 cents per quart. The milk is processed and bottled and delivered to milk depots by Boston dairies who are under contract. These contracts are bid for by the dairies and the cost per quart, which must be under 2 cents, has ranged from 1.4 cents to 2.0 cents per quart. These processing costs are paid by the relief agencies in Boston. The "Relief milk" is sold to designated relief families at 5 cents per quart. The difference between the 5 cents received from the consumer and the 6.8 cents paid the farmer is paid by the Federal Surplus Commodities Corporation. Families on W. P. A. are permitted to buy milk at 7 cents per quart. Of this 7 cents, 5 cents goes to the farmer, plus the amount from the Department of Agriculture necessary to make up the 6.8 cents for the farmer, and the 2 cents goes for covering the processing, bottling and delivery to the milk depots. This plan has likewise met with considerable success, and a week after its establishment operations had reached a reported volume of 72,000 quarts daily.

In Chicago a somewhat similar relief milk program has been in operation since November 13, 1939. The milk producers have agreed to a special classification of milk as relief milk priced at about 70 cents a hundredweight below the regular class I price. Milk is distributed through home deliveries, by handlers and at stations. Relief clients receive the milk without expense to them. The actual cost of the milk is 7.4 cents per quart for home-delivered milk and 5.4 cents per quart for station milk. In the home deliveries the Chicago relief authorities pay 5 cents per quart and the Department of Agriculture contributes an additional 2.4 cents per quart. At the stations the relief administration contributed 4 cents per quart and the Department of Agriculture adds 1.47 cents per quart. The gross margin for the handler making home deliveries is 4.42 cents per quart, while the gross margin of handlers delivering at stations is 2.47 cents per quart. The program has been set up to provide a maximum delivery of 183,300 quarts per day in 75 home-delivered areas and 24,000 quarts a day at 21 distributing stations. It is not expected that this

maximum will be reached, but it has been estimated that 100,000 relief clients will be reached.

The experiments with relief milk and with sales at low prices through subsidization have not been extensive but do contain some important implications. It appears that there may be a considerable market among the low income groups that is now excluded by the present levels of prices which could be tapped by lower prices and more restricted delivery services without materially influencing the sales at the going level prevailing in the market. Such a finding is important in that it indicates a possibility of expanding producer sales and at the same time bringing milk within the range of the low income groups. It may also indicate a means of lowering present distributive costs. A demonstration of the prices at which milk might be sold under more restricted services might awaken the general market to a demand for the provision of milk to all in the market on a similar basis.¹⁵

THE PRESENT STATUS AND ADMINISTRATIVE PROBLEMS OF THE FLUID MILK PROGRAM

The present position of the Federal Government's fluid milk program may now be summarized in the light of the previously traced development. It has become apparent that the number of markets in which a program may be instituted is seriously limited by several factors. The program is not nearly as extensive as originally supposed. The first limitation is the definition of interstate commerce adopted by the courts. The precise position that will finally be adopted by the court is by no means clear, but the administration has been unable to persuade the court that the intricacy of price relationships produces market influences extending beyond State borders even though the actual product itself does not cross the border. The court appears to hold instead that milk involved in the market must actually move across State lines. The precise amount of such milk necessary to give the market an interstate character is also undefined. A safe supposition seems to be that it is probably considerable, for example, a fourth or more, and it might reasonably be held that this fourth should not readily be replaceable by milk within the border of the State, that is, that a real reason exists for the interstate shipment. This viewpoint, of course, restricts the operation of the Federal control program to markets lying near the borders of States and excludes markets essentially similar except for the accidental location of the State boundaries. The larger northeastern markets have such extended milksheds that they include several of these smaller States, but as the States become larger and cities generally smaller toward the West and South a considerable number are excluded.

A second limitation is that entrance to the market and even continuance of a Federal program in the market is dependent upon the favor of the dominant local cooperative. The provisions of the act requiring a referendum by the producers before the introduction of a program and permitting the officers of the cooperative to cast a unanimous vote for their members gives the cooperative nearly complete control of the plan adopted. This does not mean that the cooperative

¹⁵ Later incomplete reports from city and State officials connected with the programs in Boston, New York, and New Orleans indicate some falling off in relief milk sales, particularly in the first two of these markets, and some doubt as to the effects upon total consumption.

can force the Government to institute a plan or to provide a plan deemed inadvisable to the Government but does give the cooperative a veto power over any plan proposed. This means that the Government could not institute a plan in a market, regardless of how desirable it might be from the viewpoint of the general public or of the other groups involved, if the group in the producers' cooperative should deem it undesirable from their viewpoint. These provisions make it essential for the administration to secure approval of the cooperative and an expression of cooperation, together with an expressed desire for a Government program even before the hearings on the proposed plan are held. There appears to have been no market at any stage of the program in which a plan has been instituted without the approval of the local cooperative, but formalization of this policy into a legal position of dominance by a single group appears unwarranted.

Finally, there are 20 States¹⁶ in which there are State milk control boards, and in these States it is necessary for some sort of a joint program with the State control board to be worked out. In some cases the State programs and personnel do not subscribe to the ideas held by those in the Department of Agriculture and development of cooperative programs has been difficult if not impossible in these cases. Moreover, in most cases in which the Federal program is called upon to contribute, several States are likely to be involved, and the division of responsibility and character of the market plan require difficult negotiations.

In the markets in which the Federal milk programs have been instituted there is evidence of certain features which have resulted in cumbersome administration. The difficulty of instituting changes in prices has raised the problem of securing sufficient flexibility for a continuing program. As at present required by the law, under proper procedure, it is necessary to hold a hearing whenever any important change is made in the order. This requires considerable time and preparation and tends to result in the postponement of changes as long as possible, to make sure that the conditions necessitating the change are of a continuing nature. Milk markets are constantly changing in supplies of milk and in their demand situation which means that any price structure must be amenable to change if it is through its variations to serve a proper operating function in the market. The required procedures tend to produce fixity in the market. Some endeavor toward flexibility has been attempted by the incorporation of formula prices for class I milk in several markets. These are frankly experimental, and while they probably possess distinct advantages over an unchanging price, it is unlikely that circumstances can be well enough foreseen to permit development of a formula price adequate to solve the problem completely. Moreover, considerable difficulty is likely to be experienced in securing acceptance by the market of such a program.

The chief difficulties of the present position would appear to be in the lowering of prices. It is difficult to imagine the whole group of milk producers supplying a market being sufficiently aware of a market situation to vote a decrease in the price of their own milk. Such a vote could probably only be secured when the market situation became so bad as to be obvious to nearly all. One of the functions of a changing price, however, is to reflect early the necessity of

¹⁶ As of the summer of 1940.

change so as to permit the change to be made gradually. It would appear that downward changes would be postponed under this procedure well past the time when they should have taken place. This is one of the reasons for a drift toward a formula price, and for the inclusion of some provision, where possible, in the original order providing for a subsequent decrease in price at a specified time or under the development of specified conditions. The only time when ready acceptance of a provision for price lowering in a market appears possible is at the time of the original imposition of the order or when an upward change in price is to be instituted. At that time the thought of the producers in the market is on the immediate gain and the subsequent lowering is viewed as a necessary concomitant of these gains. The real issue of a general decrease in price in a number of markets is yet to be faced, but it would be unwise not to recognize that difficulties in doing so exist.

A minor administrative difficulty arises from the bias of the market administrators. These men are selected by the Secretary and represent him in the market. They are, however, actively in contact with the various groups in the market and must constantly work with them. The market administrator is likely to drift into a position where he tends to think of himself as a representative of the market and adopt a view that it is his function to endeavor to "put across" with the Dairy Section and the Secretary the things desired by the specific groups in the market. In short, they tend to become imbued with an entrepreneurial attitude of securing every possible concession for their particular market, rather than discouraging at the outset demands contrary to the general policy or undesirable from the viewpoint of general market operation.

OBJECTIVES AND STANDARDS IN SETTING PRICES

The general objective of the Federal fluid milk program has been to raise prices to milk producers as high as possible. The level to be attained was stated in the original act as the level which "will give agricultural commodities a purchasing power with respect to articles that farmers buy, equivalent to the purchasing power of agricultural commodities in the base period." This was subsequently modified in the amendment of 1937 by which, when the Secretary finds that such parity prices "are not reasonable in view of the price of feeds, the available supply of feeds, and other economic conditions which affect market supply and demand for milk, and its products in the market area to which the contemplated market agreement, order, or amendment relates, he shall fix such prices as he finds will reflect such factors, insure a sufficient quantity of pure and wholesome milk, and be in the public interest." These parity prices have been constantly computed and observed by the Dairy Section but have probably had little to do with the actual prices finally arrived at and established in the markets. The actual objective, which has been substantially unchanged since 1934, appears to have been to establish the highest producer prices in the market that could be sustained for any considerable period of time. In the early stages of the program to have set prices at the prescribed parity levels would have resulted in such a flow of milk as to have flooded the market and expanded its area beyond a territory reasonably to be expected to be a continuous source of supply. These larger supplies would have resulted in

subsequent lower prices and a difficult process of supply contraction. In the few cases where higher than parity prices were possible, various qualifications such as recomputation of parity on a more favorable basis or designating the situation as a temporary emergency have been followed.

The control devices utilized to maintain these prices have been to establish legal minimum purchase prices for milk bought from producers and to provide for a complete accounting for all the milk in the market to insure that these prices were actually paid to the farmers. In order to insure the successful operation of these control devices the Federal program has centered a considerable supervision of the market operation in the hands of a market administrator appointed by the Secretary. The other institutional procedures of the market have been left largely unchanged. The general policy has been to utilize the customs and units in the market unchanged, but to examine and study the market with a view of strengthening those groups whose strengthening would tend to improve the operation of the market. In this respect the Dairy Section has a unique and enviable record among administrative bodies.

No definite standards have been developed as a basis of establishing the exact price to be set for milk in a given market. Instead an individual examination of the special circumstances of each market has been made and a considerable degree of judgment is exercised by the Dairy Section in each case. A number of considerations, however, enter into this judgment, although they hardly justify the designation of the term standards. The first of these is the historical record of prices in the market. In this the average differential between butter prices and the class I price prevailing in the market during the predepression period is added to the current butter prices to arrive at a current hypothetical class I price. In some cases adjustments for changes in transportation charges and quality changes in the milk between the two periods are included. Prices arrived at in this way tend to indicate an upper limit to prices to be considered for the market. The predepression period was one of relatively favorable class I prices in most markets. The final prices adopted are usually somewhat lower than the hypothetical price arrived at on this basis.

Another computation with respect to prices is built up to indicate the competitive price or lowest reasonable level to be expected. In this calculation the price of milk for manufacturing purposes in its utilization at the edge of the milkshed at the time is taken as a base. To this base price is added transportation charges to the city, a premium for quality, a cost of meeting the sanitation requirements and charges for the special care in handling the milk. In addition an allowance has been made in the way of a premium for convenience in the location of the milk. This is thought to be considerable in the eastern milksheds and negligible in the surplus producing areas of the West. A great deal of estimation has been necessary in arriving at the additions to be made in a particular market. The price arrived at on this basis has generally been substantially lower than that secured on the historical basis. It represents an estimate of a price which might be expected in a market in the entire absence of a monopoly element. It generally constitutes the low of the range of prices to be considered in the establishment of prices for the market. Table 2 gives examples of these computed prices and indicates their relations to the minimum prices fixed and the prices actually paid.

TABLE 2.—Fixed minimum prices, prices paid, and price estimates for class I milk per hundredweight in various markets, July 1939¹

Market	Butterfat content	Fixed prices	Prices paid	Parity prices	Estimated prices ²			Deviation of prices paid from upper limit
					Historical	Competitive	Upper limit	
Under Federal control:	Percent	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Lowell-Lawrence, Mass.	3.7	3.06	3.06	3.24	3.54	2.30	3.54	-0.48
Boston, Mass.	3.7	3.06	3.06	2.96	3.22	2.30	3.22	-.16
Fall River, Mass.	3.7	3.35	3.52	3.34	3.61	2.38	3.61	-.09
New Bedford, Mass.	3.7	3.40	³ 3.715	3.49	3.78	2.38	3.78	-.065
Cincinnati, Ohio	4.0	2.35	2.35	2.66	2.54	2.06	2.54	-.19
Toledo, Ohio	3.5	2.35	2.35	2.44	2.46	1.89	2.46	-.11
Fort Wayne, Ind.	4.0	2.15	2.15	2.29	2.23	1.98	2.38	-.23
La Porte County, Ind.	3.8	2.42	⁴ 2.42	2.23	2.15	1.86	2.26	+ .16
Battle Creek, Mich.	3.5	1.85	2.45	2.46	2.54	1.74	2.54	-.09
Kalamazoo, Mich.	3.9	2.00	2.45	2.72	2.88	1.83	2.88	-.43
Quad Cities, Ill.-Iowa	3.5	1.90	2.10	2.17	2.15	1.68	2.15	-.05
Twin Cities, Minn.	3.5	1.75	⁴ 1.75	2.08	2.05	1.64	2.05	-.30
Dubuque, Iowa	3.8	1.95	⁴ 1.95	2.12	1.88	1.65	2.05	-.10
Sioux City, Iowa	3.5	1.46	1.85	2.38	2.11	1.68	2.11	-.26
St. Louis, Mo.	3.5	2.20	2.20	2.22	2.08	1.92	2.32	-.12
Kansas City, Mo.	3.8	2.40	2.40	2.37	2.44	1.83	2.44	-.04
Omaha, Nebr.	3.8	2.05	2.05	2.32	2.06	1.68	2.08	-.03
Leavenworth, Kans. ⁵	B. F.	.50	.550	.612	.581	.465	.581	-.031
Topeka, Kans. ⁵	B. F.	.4925	.496	.489	.433	.488	.543	-.047
Wichita, Kans. ⁵	B. F.	.53	.515	.581	.530	.505	.615	-.100
Louisville, Ky.	4.0	2.18	2.10	2.36	2.00	1.86	2.26	-.16
Denver, Colo. ⁵	B. F.	.65	.600	.608	.524	.497	.607	-.007
San Diego, Calif. ⁵	B. F.	.64	⁵ .640	.922	.920	.545	.920	-.280
Others:								
Springfield, Mass.	3.7		3.31	3.22	3.47	2.30	3.47	-.16
Worcester, Mass.	3.7		3.55	2.85				
Providence, R. I.	3.7		3.18	3.31	3.50	2.38	3.50	-.32
New York, N. Y. (210 M. Z.)	3.5			2.35	2.41	1.88	2.41	
Philadelphia, Pa.	3.5		2.78	2.77	2.93	2.16	2.93	-.15
Pittsburgh, Pa.	3.5		2.10	3.08				
Terre Haute, Ind. ⁵	B. F.			.601	.563	.495	.605	
Chicago, Ill.	3.5		⁴ 1.47	2.10	2.51	1.61	2.61	-1.04
Detroit, Mich.	3.5		1.90	2.71	3.07	1.89	3.07	-1.17
Des Moines, Iowa	3.5			2.26	2.27	1.61	2.27	
St. Joseph, Mo.	4.0		2.30	2.29	2.10	1.75	2.15	+ .15
Lincoln, Nebr. ⁵	B. F.		.449	.582	.472	.465	.575	-.125
District of Columbia	4.0		⁵ 3.49	⁵ 2.89	3.00	2.39	3.00	+ .49
Richmond, Va.	4.0		⁵ 3.62	⁵ 3.98	⁵ 4.43	2.39	4.43	-.81
Greensboro, N. C.	4.0			3.02	3.13	2.44	3.13	
New Orleans, La.	4.0		2.55	2.77				
San Francisco, Calif. ⁵	B. F.		.649	.708	.682	.554	.682	-.033

¹ Data supplied by Dairy Section of the Agricultural Adjustment Administration.² Farm price of butterfat in Minnesota on July 15 was 24 cents; farm price of corn for the United States was 47.8 cents.³ July 1-15.⁴ June price.⁵ Expressed as price per pound butterfat.⁶ Included premiums.

In addition to these computed prices the principals concerned in the market plan have pretty definite ideas of what a desirable price would be. Thus the distributors will have a pretty definite notion of the price which will facilitate their operations and maintain retail sales. Likewise, the producers, generally the officials of the producers' cooperative, will have a price considered proper by them for the market. Naturally the price favored by the producer group tends to be higher than that thought proper by the distributors. These prices are in some cases merely statements for bargaining purposes, but more generally represent a seasoned judgment resulting from a long experience in the market, and in the latter case there tends to be a quite fair agreement on the price.

There remains for consideration the current situation in the market. The way in which the market has been operating is an indication of how it may be expected to operate in the future. The growth of the amount of surplus milk, the change in the number of producer distributors and small distributors, as well as the general temper of the producer feelings are all to be considered. Usually Federal supervision will be more satisfactorily received by producers when their prices are raised above previous levels, and this is often selected as a favorable time for entering a market. Rarely, however, has the Dairy Section been able to meet the full desires of the producers as to the level of the new price.

There is thus no precise standard by which the price in the market is arrived at. There are mechanical computations which tend to designate a considerable range within which the price may be expected to fall, but these provide only the rough outlines. The final decision rests upon a judgment of many factors as observed in the operating market, and the judgment of the group actively engaged in operations in the market.

INFLUENCE OF THE FEDERAL PROGRAM ON THE LEVEL OF MILK PRICES

It is impossible to demonstrate exactly the influence which the Federal program may have exercised upon the level of prices in the markets in which programs were instituted. The limitations are in the scarcity and ambiguity of the quotations of prices and the special circumstances characterizing the individual markets. The price structure of a market is complex and can rarely be completely represented or compared on the basis of a quotation for a single class of milk or individual product at retail. Moreover, many special factors may influence the price in a market, and a rise or fall cannot always with certainty be attributed to a single factor. With these limitations in mind two types of comparison follow. The first compares monthly prices in markets adopting Federal programs, before and after the adoption of the program. The second compares the annual averages for markets with Federal programs and without Federal programs.

Table 3 shows the average monthly prices for 3 months prior and 3 months following the entry of markets into a Federal program in the years 1933 and 1934. The monthly prices are those reported in the Fluid Milk Price Report of the Agricultural Marketing Service. The program was begun at different dates in the month in the markets and price in the month of entry means little, but a proper comparison may be made between the prices 1 month prior to entry and 1 month following entry. Examination of the table shows that prices in the 12 markets adopting a program in 1933 were higher than in the 15 markets included in 1934. The change in price in 1933 averaged 27 cents while in 1934 it averaged 22 cents. The lower level of price in the 1934 markets can hardly be taken as evidence of a more conservative policy since it might equally as well have arisen from the differences in size and location as compared with the markets included in 1933. The increase in price is, however, nearly as large as in 1933 and indicates that the Federal program was adopted largely in cases in which a price increase could be secured from its adoption.

TABLE 3.—*Dealers' buying prices for fluid milk before and following adoption of Federal milk program in certain markets in 1933 and 1934*

Average price for the month	12 markets entering Gov- ernment pro- gram in 1933	15 markets entering Gov- ernment pro- gram in 1934
	<i>Dol. per cwt.</i>	<i>Dol. per cwt.</i>
3 months prior to entry.....	1.92	1.64
2 months prior to entry.....	1.93	1.63
1 month prior to entry.....	1.93	1.64
Month of market entry.....	1.97	1.75
1 month following entry.....	2.20	1.86
2 months following entry.....	2.24	1.86
3 months following entry.....	2.26	1.86

The Fluid Milk Price Report of the Agricultural Marketing Service also must be relied upon for the longer time comparison among types of markets. The report now carries prices for some 125 markets, not all of which unfortunately are available for any considerable period. Among these markets there were found 45 for which monthly data were available on dealers' buying prices from 1920 to 1937. For each of these markets an average annual price has been computed for each year as a simple average of the monthly prices. The markets then have been compared over the period from 1920 to 1937 on the basis of these annual averages. The annual averages are shown in table 4.

TABLE 4.—*Average annual buying price per quart by groups of cities, 1920-37¹*

Year	14 cities under Federal control	6 cities under Federal control for short period	15 cities under no con- trol	9 cities with State control
	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
1920.....	7.79	9.08	7.94	9.02
1921.....	5.94	6.96	6.73	6.93
1922.....	5.07	5.88	5.72	6.17
1923.....	5.96	6.63	6.34	7.09
1924.....	5.5	6.63	6.38	6.92
1925.....	5.67	6.28	6.48	6.99
1926.....	5.63	6.45	6.4	7.31
1927.....	5.72	6.38	6.3	7.24
1928.....	5.8	6.40	6.26	6.77
1929.....	5.87	6.33	6.32	7.59
1930.....	5.4	6.15	6.17	7.01
1931.....	4.74	5.36	4.88	6.12
1932.....	3.75	4.52	4.02	4.41
1933.....	3.55	4.12	3.84	4.37
1934.....	4.32	4.48	4.47	5.19
1935.....	4.63	4.60	4.7	5.22
1936.....	4.88	5.08	4.34	5.43
1937.....	5.27	5.68	4.94	6.03

¹ Prices from the Fluid Milk Price Report of the Agricultural Marketing Service. These prices appear to be class I prices except in a few instances where they may be blended prices. The following cities are included under Federal control: Sioux City, Louisville, Boston, Kalamazoo, Minneapolis, St. Paul, Kansas City, St. Louis, Richmond, Omaha, Des Moines, Lincoln, Topeka, and Denver; under short Federal control: Lexington, New Orleans, Washington, San Francisco, Indianapolis, and Baltimore; under no control: Dallas, Memphis, Cumberland, Md., Clarksburg, Wheeling, Cleveland, Buffalo, Butte, Rochester, N. Y., South Bend, Sioux Falls, Seattle, Winona, Colorado Springs, El Paso; and under State control: Hartford, New Haven, Jacksonville, Portland, Oreg., Philadelphia, Pittsburgh, Springfield, Mass., Milwaukee, and Beloit.

The cities have been grouped in four classes: Those with a Federal program for most of the period between 1934 and 1937, those with a Federal program for only a short period, those under no known controls, and those under State milk control boards. The groupings cannot be exact because of the varying periods of Federal and State programs. Simple averages have been computed by years for each classification.

It appears that prices in the markets under Federal control have risen relative to the prices in other markets. The difference in the absolute levels of prices is probably of no significance because of the differences in prices depending upon the location and size of the particular markets, but it appears probable that the relatively higher position of the markets under Federal marketing plans in the period from 1933 to 1937 is a result of the Federal program. When 1937 is compared with the period 10 years earlier the change appears to have been close to a cent a quart or perhaps 40 cents per hundredweight. An unknown portion of this may have been due to changes in the methods of pricing milk in these markets during the period, such as a shift from a flat price to a classified price plan in the market.

Dealers' margins when computed on the basis of the difference in retail price per quart of milk and the dealers' buying price for fluid milk are not representative of the average margins of dealers. Milk and cream are sold in containers of many sizes with different margins and at wholesale and retail with different margins and the proportions of these sales differ among cities. The retail quart margin for family trade is the only one readily available for any reasonable number of cities and is probably fairly reliable as an index where the comparison is between groups of identical cities over a period of time. These margins as computed from the data in the Fluid Milk Price Reports of the Agricultural Marketing Service are shown in table 5. The uniformity of these margins over the period considered is marked and there is likewise considerable uniformity among the groups. Dealers appear to have had their margins close to 1929 levels in 1937 in contrast to their buying prices which were lower. There appears to have been no appreciable difference in the behavior of these margins in the cities under Federal programs than in cities elsewhere.

TABLE 5.—Average annual spread per quart of milk between dealers' buying price and selling price to family trade, by groups of cities, 1920-37¹

Year	14 cities under Federal control	8 cities under Federal control for short period	13 cities under no control	8 cities with State control
	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
1920.....	7.3	6.7	7.5	6.8
1921.....	6.3	6.6	7.3	6.7
1922.....	6.0	5.9	7.7	6.4
1923.....	6.3	6.1	6.1	5.2
1924.....	6.6	6.2	6.9	6.6
1925.....	6.2	6.1	7.0	6.6
1926.....	6.2	6.2	6.9	6.8
1927.....	6.2	6.4	6.8	6.8
1928.....	6.4	6.4	6.8	6.7
1929.....	6.5	6.6	7.0	6.8
1930.....	6.5	6.6	6.8	5.9
1931.....	6.0	6.0	6.5	6.4
1932.....	5.7	5.7	6.0	5.8
1933.....	5.5	5.7	5.9	6.0
1934.....	5.7	5.6	6.1	6.2
1935.....	5.9	5.9	6.1	6.3
1936.....	6.2	6.0	6.3	6.5
1937.....	6.4	6.5	6.5	6.8

¹ Prices from the Fluid Milk Price Report of the Agricultural Marketing Service. The following cities are included under Federal controls: Sioux City, Louisville, Boston, Kalamazoo, Minneapolis, St. Paul, Kansas City, St. Louis, Richmond, Omaha, Des Moines, Lincoln, Topeka, and Denver; under short Federal control: Lexington, New Orleans, Washington, Los Angeles, San Francisco, Grand Rapids, Indianapolis, and Baltimore; under no control: Dallas, Cumberland, Clarksburg, Albany, Cleveland, Buffalo, Butte, Rochester, N. Y., South Bend, Sioux Falls, Seattle, Colorado Springs, and El Paso; and under State control: Hartford, New Haven, Portland, Oreg., Jacksonville, Philadelphia, Pittsburgh, Beloit, Wis., and Milwaukee.

Since the margins of dealers do not appear to have varied materially among the groups of cities the changes in retail prices to consumers are essentially those found for the dealers' buying prices. These are given as averages for 57 cities in table 6. Retail prices, although at a lower level in the cities under Federal controls in the twenties, were fully as high as the prices in the cities without Federal or State controls in 1937. The relative increase appears to have been something less than a cent a quart.

The comparative levels of producers' prices, retail prices, and dealers' margins in the latter part of the 1920's and in the period 1934-36 is shown in table 8 for cities under Federal control, under State control, and without any control. The table also shows changes in the levels of these prices in 1937 in comparison with 1929.

TABLE 6.—Average annual retail price per quart of milk to family trade,¹ by groups of cities,² 1920-37

Year	17 cities under Fed- eral control	9 cities under Fed- eral control for short period	17 cities under no control	14 cities with State control
	Cents	Cents	Cents	Cents
1920.....	15.08	16.40	15.73	15.35
1921.....	12.58	14.23	14.05	13.36
1922.....	11.11	12.61	12.26	12.12
1923.....	12.33	13.35	13.00	13.17
1924.....	12.17	12.63	13.06	13.35
1925.....	12.04	13.13	13.30	13.43
1926.....	11.98	13.35	13.21	13.31
1927.....	12.08	13.47	13.02	13.78
1928.....	12.24	13.55	13.02	13.83
1929.....	12.51	13.67	13.15	13.91
1930.....	12.12	13.46	13.00	13.82
1931.....	10.80	11.97	11.29	12.26
1932.....	9.35	10.62	9.82	10.33
1933.....	9.05	10.21	9.38	10.45
1934.....	10.08	10.61	10.30	11.57
1935.....	10.64	10.97	10.67	11.71
1936.....	11.12	11.71	10.89	12.00
1937.....	11.74	12.38	11.72	12.85

¹ Prices from the Fluid Milk Price Report of the Agricultural Marketing Service.

² The following cities are included under Federal license: Sioux City, Wichita, Louisville, Boston, Kalamazoo, Minneapolis, St. Paul, Kansas City, St. Louis, Toledo, Richmond, Detroit, Omaha, Des Moines, Lincoln, Topeka, and Denver; under short Federal control: Lexington, New Orleans, Washington, Los Angeles, San Francisco, Evansville, Ind., Grand Rapids, Indianapolis, and Baltimore; never under license: Dallas, Memphis, Cumberland, Md., Clarksburg, Wheeling, Albany, Cleveland, Buffalo, Butte, Rochester, N. Y., Davenport, South Bend, Sioux Falls, Seattle, Winona, Minn., El Paso, and Colorado Springs; and under State license: Birmingham, Bridgeport, Hartford, Jacksonville, Portland, Oreg., Philadelphia, Springfield, Mass., Pittsburgh, Salt Lake City, Milwaukee, Wausau, Wis., Beloit, Wis., and Kenosha.

TABLE 7.—Summary of changes in producer prices, in retail prices, and in dealers' margins

Cities under—	Changes in producer prices				Changes in dealers' margins				Changes in retail price to consumers			
	Average 1926-29 to average 1934-36		1929 to 1937		Average 1926-29 to average 1934-36		1929 to 1937		Average 1926-29 to average 1934-36		1929 to 1937	
	Cts.	Pct.	Cts.	Pct.	Cts.	Pct.	Cts.	Pct.	Cts.	Pct.	Cts.	Pct.
Federal control:												
Long period.....	1.17	20.2	0.60	10.2	0.40	6.3	0.10	1.5	1.59	13.0	0.77	6.2
Short period.....	1.67	26.1	.65	10.3	.57	8.9	.10	1.5	2.41	17.8	1.29	9.4
State control.....	1.95	27.0	1.38	21.8	.45	6.6			1.95	14.2	1.06	7.6
No control.....	1.82	28.8	1.56	20.6	.71	10.3	.50	7.1	2.48	18.9	1.43	10.9

Source: Tables 4, 5, and 6. Note that the number of cities for which changes are presented varies for producer prices, retail prices, and dealers' margins, as in the tables from which the data are summarized.

TABLE 8.—*Excess in retail price of a quart of fluid milk over a 14½ ounce can of evaporated milk on Oct. 15¹*

Year	23 cities ² under Federal program	28 cities ² with no Federal program	Year	23 cities ² under Federal program	28 cities ² with no Federal program
	Cents	Cents		Cents	Cents
1920.....	3.22	3.92	1930.....	4.67	5.58
1921.....	1.53	2.75	1931.....	4.13	4.32
1922.....	2.78	3.79	1932.....	4.56	4.56
1923.....	3.00	3.45	1933.....	3.99	4.29
1924.....	3.74	4.32	1934.....	4.74	4.92
1925.....	3.44	4.13	1935.....	4.65	4.78
1926.....	3.46	3.99	1936.....	4.31	4.37
1927.....	3.51	4.27	1937.....	4.99	4.76
1928.....	3.70	4.50	1938.....	5.26	5.31
1929.....	4.66	5.34			

¹ Prices as reported by the Bureau of Labor Statistics.

² 23 cities with Federal programs are: Atlanta, Baltimore, Boston, Chicago, Cincinnati, Denver, Detroit, Fall River, Indianapolis, Kansas City, Los Angeles, Louisville, Minneapolis, New Orleans, Omaha, Philadelphia, Providence, Richmond, St. Louis, St. Paul, San Francisco, Savannah, and Washington, D. C. The 28 cities without Federal programs were: Birmingham, Bridgeport, Buffalo, Butte, Charleston, Cleveland, Columbus, Dallas, Houston, Jacksonville, Little Rock, Manchester, Memphis, Milwaukee, Mobile, Newark, New Haven, New York, Norfolk, Peoria, Pittsburgh, Portland, Maine, Portland, Oreg., Rochester, N. Y., Salt Lake City, Scranton, Seattle, and Springfield, Ill.

Another comparison is possible on the basis of the quotations of the Bureau of Labor Statistics. Even though this is limited to retail prices it is nevertheless worth examining since the 51 cities included in the Bureau of Labor Statistics quotations differ considerably from the cities available for the Fluid Milk Price Report comparisons. Prices have been taken for the 15th of October rather than yearly averages. The comparison is on the basis of the margin between the price of a quart of fluid milk at retail and the price of 14½ ounce can of evaporated milk at retail. These margins have been computed for each city for October 15 of each year and then the cities grouped into 23 cities in which there has been a Federal milk program and 28 cities in which there has been no Federal milk program. The results are essentially those previously secured. In both groups of cities fluid milk has risen in price relative to evaporated milk and the extent of the rise in the cities under Federal control appears to have been greater than in cities not under Federal control during the period from 1934 to 1938.

It thus appears that producer prices have been raised in the markets under Federal programs, that dealers' margins have thus far been uninfluenced by the program and that retail prices to consumers are somewhat higher. The amount as estimated from such data as available here appears to have been on the average in the neighborhood of 20 to 40 cents to producers and an increased price to consumers of less than a cent per quart.

THE POSITION OF VARIOUS GROUPS UNDER THE PROGRAM

The principal groups involved in a milk market are the producers, the distributive group, including the labor union, and the general public or consumers. Each group has certain special interests often in conflict with the other groups, and generalizations regarding even these groups are difficult since even within a group the circumstances differentiating individuals are often substantial.

The producers as a whole appear to have secured a substantial advantage from the Federal milk program. As has just been shown, it is probable that prices were given a considerable upward impetus in the early period of operation under the agreements. Prices advanced considerably beyond their immediately preceding level in the markets with agreements. Moreover, it is likely that the influence of the program extended beyond these markets. The mere possibility of an agreement and the preliminary negotiation by the producers' organization or threat of request probably raised prices in certain markets in which programs never were instituted. The higher prices in these markets also probably stiffened the resistance to declines in other markets. Beyond this first period the data also support the conclusion that the Federal program has tended to raise and support producer prices. It is also unfortunately true that there are some markets in which the administration has been maneuvered by the local groups into supporting a price level that appears high relative to other markets and to the level that can be sustained over any considerable period.

As has previously been emphasized, the producer cooperative has gained in its power to dominate the market. No order can be placed in effect in the market without its approval. It has been suggested by some, however, that the hold of the cooperative upon its individual membership has been lessened. Certain functions are now performed for all in the market by the market administrator and the advantages of membership in the cooperative may be felt by producers to be less essential than previously. In such a case the cooperative may have difficulty in maintaining its membership. It may be pointed out, however, that in a number of markets the producers cooperative has gained in membership following the adoption of a Federal program.

The more complete and accurate accounting for milk in the market under the market administrator has been beneficial to the producers and probably also to the market as a whole. There is now provided a compulsory reporting and a legality to the policing of the designated terms of transactions in the market that was formerly absent. Many producers' cooperatives were not sufficiently strong to force a proper accounting for the milk sold by them and were dependent upon voluntary reports by dealers. These reports are now certified and audited. This compulsory reporting has resulted in much more information relating to the operation of the market becoming available than ever before. This increased knowledge should result in a better understanding of the market problems by all concerned and facilitate better market operation.

In many markets there has also been an improvement in the situation with respect to the equity of the various deductions from the specified class prices to be paid producers for their milk. The cooperative generally bargained with the distributors for the various prices to be paid their members for milk. These were, however, gross prices and the net prices included deductions for transportation and often station charges. Markets varied enormously in these charges but there was a large element of custom present which often retained the charges at levels extremely profitable to the distributor, although far less expensive methods than the original were employed in handling the milk. The cooperative was usually aware of where these charges were unreasonable but generally powerless to force an adjustment.

The Federal programs have in many markets lowered these charges and in general resulted in a more uniform arrangement of charges throughout the market. The examination of the market practices by an unbiased outsider is likely to disclose hidden practices unjustified from the viewpoint of the market as a whole and the Federal milk program has undoubtedly made a marked improvement in these respects.

The position of the distributors as a group under the Federal program appears to have been unchanged. Such data as are available indicate little change in margins. Among the distributors the larger distributors have probably gained at the expense of the smaller distributors. The most effective weapon of the smaller distributor in securing new business is ordinarily price cutting. He can no longer as readily secure special supplies of low-priced milk from producers to support and in part bear the costs of this retail operation. In forcing distributors to pay the prescribed producer prices a considerable restraint is thus placed on retail price cutting. The larger distributor with somewhat better service and more prestige than the ordinary small distributor probably gains.

It is a weakness of the Federal program that no general attack has been made upon the problem of the costs of milk distribution. Insofar as the purpose is solely that of raising prices to farmers only slight emphasis need necessarily be given to a reduction of these costs, but for a general public program including the interests of the consumers as well as the producers considerable emphasis upon a reduction in these costs would be desirable.

The interests of the consumer have been poorly represented in the Federal milk programs. The statistical data indicate that he has been called upon to pay the major share of the gains that the producers seem to have derived. Consumer groups have had their opportunity to present their case at the various hearings preceding the issuance of orders for the market. Few among the consumers have had, or are likely to have, sufficient information to present a conclusive case in support of their interests. Their argument has usually been an unsupported statement that prices are already too high in the market. Examination of the hearing records will disclose in the majority of cases little in the way of actual information provided by consumers upon which the Secretary or the Dairy Section may draw in reaching a decision. The data in the economic brief supplied for the hearing by the Dairy Section have thus far been simply a demonstration that changes in the incomes of consumers have probably been such as to sustain takings even at higher retail prices, or that incomes are at such a level that a given retail price may be sustained.

The Consumers' Counsel in the Agricultural Adjustment Administration is the organization designed to participate actively in guarding the consumers' interests in the program. It should be pointed out, however, that the Consumers' Counsel occupies an anomalous position. He is charged with protecting the interests of the consumer under the terms of an act which is clearly monopolistic in character. This sets him in opposition to the operating unit which is endeavoring to carry out the provisions of the act in raising prices. Naturally the Consumers' Counsel comes to be regarded largely as an obstructionist by the Dairy Section and other groups desiring higher prices. The Consumers' Counsel must also operate on many fronts. There is a

considerable group concerned with milk as a sole activity, while the smaller staff of the Consumers' Counsel must deal with numerous other commodities as well. Moreover, the amount of information available to the Consumers' Counsel is more limited and there is difficulty in presenting a conclusive case against the larger evidence assembled elsewhere. The number of cases in which the Secretary has sustained the objections of the Consumers' Counsel over the recommendations of the Dairy Section is extremely small.

As noted earlier the experiments with sales of milk at low prices to relief recipients and W. P. A. workers suggests that there exists a substantial market in the low income groups that could be cultivated by lower prices and more limited delivery services without much diminishing the volume of sales at regular prices.

The Federal milk program has probably had little influence on the general economic recovery of the country as a whole. The fluid milk producers are only a comparatively small sector even of agriculture. They already occupied a preferential position through their strong cooperative organizations and in a number of markets had developed a considerable monopolistic position. The gains in their income were largely at the expense of increased expenditures of consumers and probably resulted in decreased expenditures elsewhere. Since there were no advance payments to them as was the case with certain other agricultural groups it is impossible to claim an expansion of total purchasing power. What appears to have taken place was a transfer of income to milk producers from consumers and there is no good reason to suppose that this transfer in itself would stimulate economic activity.

APPENDIX TO CHAPTER I

HISTORY OF MILK MARKETS WHICH HAVE BEEN UNDER FEDERAL CONTROL, GIVING TYPE OF INSTRUMENT IN EFFECT

Market	Type of instrument	Date effective	Date suspended	Date terminated
Alameda County, Calif.	Agreement	Nov. 7, 1933		Feb. 1, 1934
	License	Nov. 14, 1933		July 1, 1934
	do.	July 1, 1934		
	Amendment	Sept. 1, 1934		
	do.	Jan. 14, 1935		
Ann Arbor, Mich.	Amended license	Jan. 20, 1935		
	Amendment	May 4, 1935	Aug. 31, 1935	Nov. 30, 1935
	License	July 1, 1934		
	Amended license	Dec. 20, 1934		
	do.	May 1, 1935		Feb. 15, 1936
Atlanta, Ga.	License	Dec. 1, 1934		
	Amended license	Aug. 13, 1935	Jan. 27, 1936	July 1, 1936
Baltimore, Md.	Agreement	Sept. 29, 1933		Feb. 1, 1934
	License	do.		
	Amendment	Oct. 31, 1933		
	do.	Nov. 16, 1933		Feb. 1, 1934
	License	Aug. 1, 1934		
Battle Creek, Mich.	Amendment	Sept. 24, 1934		Feb. 26, 1935
	License	July 1, 1934		
	Amended license	Dec. 20, 1934		
	License	July 1, 1934		July 26, 1935
	Agreement	Nov. 3, 1933		Feb. 1, 1934
Boston, Mass.	License	do.		Mar. 16, 1934
	do.	Mar. 16, 1934		
	Amendment	May 1, 1934		
	do.	June 1, 1934		
	do.	July 17, 1934		
	do.	Aug. 22, 1934		
	do.	Oct. 1, 1934		
	Amended license	Feb. 24, 1936		
	do.	May 1, 1935		
	Amendment	May 18, 1935		
	do.	June 1, 1935		
	Amended license	July 16, 1935		Feb. 9, 1936
	Order	Feb. 9, 1936	Aug. 1, 1936	
	Reinstated	July 1, 1937		
	Amendment	Aug. 1, 1937		
	do.	Jan. 16, 1939		
	Agreement	do.		
	do.	Aug. 1, 1933		Dec. 20, 1933
	License	do.		
	Amendment	Nov. 3, 1933		
	do.	do.		
Chicago, Ill.	do.	Nov. 21, 1933		Jan. 8, 1934
	License	Feb. 5, 1934		
	Amended license	June 1, 1934		
	Amendment	July 1, 1934		
	do.	July 18, 1934		
	do.	Aug. 22, 1934		
	do.	Nov. 1, 1934		
	Amended license	Dec. 2, 1934		
	Amendment	Jan. 17, 1935		Mar. 2, 1935
	Order	Sept. 1, 1939		
	Agreement	May 1, 1938		May 14, 1939
	Order	do.		
	Amendment	May 14, 1939		
	License	Sept. 1, 1934		
	Amendment	Oct. 1, 1934		
Cincinnati, Ohio.	Amended license	Apr. 3, 1935		
	Amendment	July 1, 1935		
	Agreement	Oct. 25, 1933		Feb. 1, 1934
	License	Oct. 23, 1933		Feb. 14, 1934
	do.	Feb. 14, 1934		
Des Moines, Iowa.	Amended license	May 5, 1934		
	Amendment	June 16, 1934		
	Amended license	Dec. 5, 1934		July 1, 1938
	do.	do.		
	do.	do.		

Market	Type of instrument	Date effective	Date suspended	Date terminated
Detroit, Mich.	Agreement	Aug. 27, 1933		Feb. 1, 1934
	License	do.		Apr. 1, 1934
	Amendment	Nov. 20, 1933		
	do.	do.		
	License	Apr. 1, 1934		
	Amendment	June 17, 1934		
	Amended license	Nov. 5, 1934		
	Amendment	Dec. 6, 1934		
	do.	Jan. 10, 1935		
	Amended license	May 6, 1935	Dec. 22, 1937	
District of Columbia	Order	Sept. 21, 1936		
Dubuque, Iowa	Amendment	Dec. 1, 1936	Feb. 8, 1937	
	License	Dec. 5, 1934	Sept. 30, 1936	
	Order	Oct. 1, 1936		
	Amendment	Mar. 1, 1937		
Evansville, Ind.	Order as amended	June 16, 1939		
	Agreement	Oct. 23, 1933		Feb. 1, 1934
	License	do.		Feb. 26, 1934
	do.	Feb. 26, 1934		
Fall River, Mass.	Amended license	Nov. 25, 1934		
	do.	July 24, 1935		
	Amendment	Aug. 17, 1935		Feb. 1, 1936
	License	Apr. 1, 1934		
	Amendment	May 1, 1934		
	do.	June 1, 1934		
	Amended license	Sept. 1, 1934		
	Amendment	Mar. 16, 1935		
	Amended license	Apr. 9, 1935		
	Amendment	July 14, 1935	Apr. 30, 1936	
Flint, Mich.	Order	May 1, 1936		
	Amendment	Apr. 1, 1937		
	License	July 1, 1934		Sept. 14, 1935
	do.	do.		
Fort Wayne, Ind.	Amended license	June 19, 1935		
	Amendment	Aug. 16, 1935		
	Agreement	Feb. 1, 1937		Oct. 15, 1938
	Order	Oct. 15, 1938		
Fort Worth, Tex.	Order as amended	Sept. 1, 1939		
	License	Sept. 1, 1934		
	Amendment	Oct. 1, 1934		
	do.	Oct. 17, 1934		
Grand Rapids, Mich.	Amended license	Nov. 5, 1934		
	Amendment	Jan. 11, 1935		
	Amended license	May 22, 1935		July 1, 1935
	License	July 1, 1934		
Indianapolis, Ind.	Amended license	Nov. 5, 1934		
	Amendment	Dec. 5, 1934		
	Amended license	May 1, 1935	Sept. 1, 1936	Apr. 1, 1937
	License	Apr. 1, 1934		Feb. 28, 1936
Kalamazoo, Mich.	do.	July 1, 1934		
	Amended license	Dec. 16, 1934		
	do.	May 1, 1935		
	Amendment	June 1, 1935		
Kansas City, Mo.	License	Mar. 17, 1934		
	Amended license	Apr. 1, 1934		
	do.	May 16, 1934		
	do.	July 17, 1934		
Knoxville, Tenn.	do.	July 1, 1935		
	Amendment	Aug. 1, 1935		
	Order	Dec. 1, 1936		Dec. 1, 1936
	Amended order	Sept. 1, 1939		
Lansing, Mich.	Agreement	Oct. 9, 1933		Feb. 1, 1934
	License	Oct. 28, 1933		June 24, 1934
La Porte County, Ind.	do.	July 1, 1934		
	Amended license	Nov. 5, 1934		July 26, 1935
	Order	Nov. 13, 1937		
	Amendment	Aug. 20, 1938		
Leavenworth, Kans.	Order as amended	Aug. 3, 1939		
	License	May 16, 1934		
	Amended license	Aug. 18, 1934		
	do.	Dec. 16, 1934		
Lexington, Ky.	Amendment	June 20, 1935		
	do.	July 6, 1935		
	License	May 2, 1934		
	Amended license	Sept. 1, 1934		July 16, 1935
Lincoln, Nebr.	License	Mar. 17, 1934		
	Amended license	May 16, 1934		
	Amendment	July 17, 1934		
	Amended license	Aug. 18, 1934		
	do.	Nov. 16, 1934		
	do.	June 19, 1935		Apr. 30, 1939

Market	Type of instrument	Date effective	Date suspended	Date terminated
Los Angeles, Calif.	Agreement	Nov. 17, 1933		Feb. 1, 1934
	License	Nov. 20, 1933		June 1, 1934
	do	June 1, 1934		
	Amendment	Aug. 22, 1934		
	do	Oct. 1, 1934		
	Amended license	Dec. 16, 1934		
Lowell-Lawrence, Mass.	do	Feb. 28, 1935		
	Amendment	Mar. 28, 1935		July 1, 1935
	Order and agreement	Feb. 12, 1939		
	License	June 1, 1934		
	Amended license	Aug. 17, 1935		
	License	July 1, 1934		
Muskegon, Mich.	Amended license	Nov. 5, 1934		
	Amendment	Jan. 11, 1935		July 26, 1935
	License	Apr. 1, 1934		
	Amendment	May 1, 1934		
	do	June 1, 1934		
	Amended license	Sept. 1, 1934		
New Bedford, Mass.	Amendment	Mar. 16, 1935		
	Amended license	Apr. 6, 1935		
	Amendment	July 14, 1935		
	Agreement and order	Sept. 1, 1938	Feb. 1, 1939	
	Reinstatement order	July 1, 1939	Mar. 18, 1939	
	License	Oct. 28, 1933		Feb. 1, 1934
New Orleans, La.	Agreement	Oct. 31, 1933		Do.
	License	Mar. 17, 1934		Mar. 14, 1935
	do	Apr. 1, 1934		
	Amendment	May 1, 1934		
	do	June 1, 1934		
	Amended license	Sept. 1, 1934		
Newport, R. I.	Amendment	Mar. 16, 1935		
	Amended license	Aug. 16, 1935		Mar. 1, 1936
	Amendment	June 16, 1934		
	Amended license	July 18, 1934		
	do	Sept. 4, 1934		Mar. 15, 1935
	License	Feb. 23, 1934		
Oklahoma City, Okla.	Amended license	June 1, 1934		
	Amendment	June 16, 1934		
	Amended license	Nov. 16, 1934	Apr. 4, 1939	
	Order	Apr. 5, 1939		
	Agreement	Aug. 25, 1933		Feb. 1, 1934
	License	do		July 1, 1935
Philadelphia, Pa.	do	Nov. 10, 1934		
	Amendment	Nov. 21, 1934		
	Amended license	Aug. 16, 1935	Apr. 1, 1936	Sept. 30, 1936
	License	July 1, 1934		
	Amendment	Aug. 18, 1934		
	do	Oct. 22, 1934		Mar. 2, 1935
Port Huron, Mich.	License	Apr. 1, 1934		
	Amendment	May 1, 1934		
	do	June 1, 1934		
	Amended license	Sept. 1, 1934		
	do	Oct. 1, 1934		
	Amendment	Mar. 16, 1935	Apr. 4, 1935	Nov. 30, 1935
Quad Cities, Iowa-Ill.	License	June 1, 1934		
	Amended license	Sept. 1, 1934		
	Amendment	Oct. 22, 1934		
	Amended license	Feb. 26, 1935		
	Agreement	Dec. 20, 1933		Feb. 1, 1934
	License	do		May 1, 1934
Richmond, Va.	do	May 1, 1934		
	Amended license	Apr. 16, 1935	Nov. 1, 1937	Oct. 1, 1938
	License	July 1, 1934		July 26, 1935
	Agreement	Nov. 22, 1933		Feb. 1, 1934
	License	Nov. 25, 1933		Mar. 2, 1934
	do	Mar. 2, 1934		
Saginaw, Mich.	Amended license	June 1, 1934		
	do	Aug. 14, 1934		
	Amendment	Oct. 10, 1934		
	Amended license	Nov. 16, 1934		
	Amendment	Feb. 22, 1935		
	Amended license	Mar. 4, 1935		
St. Louis, Mo.	Amendment	July 25, 1935		Jan. 31, 1936
	Order	Feb. 1, 1936		
	Amendment	Apr. 17, 1936		
	do	Apr. 1, 1937		
	do	Apr. 5, 1939		
	Agreement	Dec. 15, 1933		Feb. 1, 1934
San Diego, Calif.	License	Dec. 18, 1933		Feb. 1, 1935
	do	Feb. 1, 1935		
	Amended license	June 19, 1935		
	Amendment	July 14, 1935		

Market	Type of instrument	Date effective	Date suspended	Date terminated
San Francisco, Calif	License	Oct. 2, 1934		
	Amendment	Jan. 14, 1935		
Savannah, Ga.	do	May 4, 1935	Aug. 31, 1935	Nov. 30, 1935
	License	Aug. 16, 1934		
Sioux City, Iowa.....	Amended license	Oct. 15, 1934		
	do	Mar. 1, 1935	Aug. 31, 1935	Nov. 30, 1935
Southern Illinois	License	Mar. 17, 1934		
	Amended license	May 16, 1934		
Toledo, Ohio.....	do	Nov. 5, 1934		
	Amendment	Dec. 22, 1934		
Topeka, Kans.....	Amended license	July 18, 1935		June 25, 1935
	License	Nov. 1, 1934		
Tucson, Ariz.....	Order	Sept. 16, 1935		
	License	Nov. 10, 1934		
Tulsa, Okla.....	Amendment	June 14, 1935		
	Amended license	July 16, 1935	Aug. 15, 1936	
Tulsa, Okla.....	Agreement	Aug. 16, 1936		
	License	Apr. 16, 1935		
Tulsa, Okla.....	Amendment	Aug. 11, 1935	Apr. 1, 1936	Oct. 1, 1936
	License	Aug. 21, 1934		
Tulsa, Okla.....	Amendment	Sept. 16, 1934		
	Amended license	Nov. 5, 1934		
Tulsa, Okla.....	Amendment	Jan. 16, 1935		
	Amended license	Apr. 16, 1935		
Tulsa, Okla.....	Amendment	July 1, 1935		
	do	Aug. 16, 1935	Oct. 16, 1935	Dec. 31, 1935
Twin Cities, Minn.....	Agreement	Sept. 2, 1933		Feb. 1, 1934
	License	do		Feb. 16, 1934
Twin Cities, Minn.....	do	Feb. 16, 1934		
	Amendment	Aug. 17, 1934		
Twin Cities, Minn.....	do	Oct. 25, 1934		
	do	Dec. 23, 1934		
Twin Cities, Minn.....	do	Jan. 9, 1935		
	do	June 5, 1935		
Wichita, Kans.....	License	Mar. 17, 1934		
	Amended license	May 16, 1934		
Wichita, Kans.....	do	Aug. 18, 1934		
	do	Jan. 21, 1935		
Wichita, Kans.....	Amendment	June 1, 1935		
	Amended license	Aug. 16, 1935		

¹ Date signed.

CHAPTER II¹

REGULATION OF FLUID MILK MARKETING IN OREGON

"Milk" under the Oregon Milk Control Act of 1933 "means fluid milk and sweet cream sold for human consumption in fluid form."² While the stated purpose of the bill is "to provide for the supervision and control of the milk industry of the State of Oregon," the regulation provided by the Milk Control Act covers probably not over 25 percent of the total milk produced in Oregon. It also covers some milk sold in Oregon but produced in the State of Washington. Of the 1½ billion pounds of milk produced on farms in Oregon in 1936, about 56 percent was used for manufactured dairy products and about 17 percent was used on farms where produced as whole milk and cream, for making farm butter and for feeding calves.³ Furthermore, the law states that "the board may by official order exempt from the license requirements, provided by this act, milk dealers selling milk in any quantities in markets of 15,000 population or less."⁴ Only a relatively small portion of the total milk produced on Oregon farms is affected directly by the Oregon Milk Control Act.

Two factors are probably largely responsible for this differentiation of milk into "milk" as defined by the Oregon Milk Control Act and milk used for other than fluid milk and sweet cream for human consumption in fluid form. One factor is the fact that in large cities the marketing of much of the fluid milk supply is done by others than the producers, and the other is the more rigid sanitary requirements imposed by city health authorities on milk used as fluid milk and cream as compared with the sanitary requirements for milk used for manufactured dairy products. The significance of the first of these is increased by the fact that a unique and specialized marketing system was developed for fluid milk, rather than using the usual marketing system for food products. The marketing of milk is unique, because milk is about the only food product for which daily doorstep delivery is a common method of marketing and because of the emphasis which some milk distributors and some associations of producers of fluid milk place upon the advantage of daily doorstep delivery. How important this specialized delivery system is considered to be by some distributors is indicated by the testimony of Thomas H. McInnerney, president of the National Dairy Products Corporation, before the Temporary National Economic Committee:

No other food industry renders a comparable service to the public. And it is largely because of this service that milk consumption in the United States ranks far ahead of practically all the leading nations of the world. Daily doorstep delivery keeps milk constantly before the public in a fashion not equaled by any other system of distribution. This daily delivery service has been the most important single factor in making milk the largest, most dependable and reliable source of farm income in the United States.⁵

¹ This chapter was prepared by Don S. Anderson.

² Now known as title XLI, Oregon Code, 1935 supplement, as amended by chs. 67 and 69, special session, and by ch. 197, Laws of 1939.

³ Calculated from reports of the Bureau of Agricultural Economics, U. S. Department of Agriculture.

⁴ Oregon Milk Control Act, sec. 4.

⁵ Statement by Thomas H. McInnerney, president, National Dairy Products Corporation, before the Temporary National Economic Committee, May 3, 1939, p. 3.

In the past it has been rather common for producers' associations as well as distributors' organizations to oppose the sale of milk through stores. The argument has been that such sales tend to reduce consumption below what it would be without store sales—for, say those who support the argument that if milk is left on the doorstep regularly the housewife will use it, while if she must go to the store for it frequently she will not bother to get milk. Insofar as producers' associations have felt the need of distributor cooperation if they were to maintain such monopoly advantage as they might have, it is natural that producers' associations would be willing to support the distributors in opposing store sales. As milk wagon drivers have become unionized, producer associations have apparently lessened their opposition to store sales.

About one-third of the total population of Oregon lives in Portland. In 1930 Portland had a population of 301,815, while the next largest city in Oregon had a population less than one-tenth of that of Portland. Portland has adopted the United States Bureau of Public Health standard milk ordinance, with some minor changes. The effect of this appears to have been to have appreciably increased the cost of producing milk for the city market as compared with producing milk for manufactured dairy products. The inspections required under this ordinance apparently have been the source of some irritation to dairy farmers, and the question has been raised as to whether all parts of the regulation are necessary for the production of safe milk. The sanitary requirements appear to have had the effect of differentiating milk producers into two groups, those supplying the city market and those producing primarily for manufactured dairy products. This differentiation is illustrated by events of the summer of 1936 when a milk shortage developed in the Portland market.

Administrator Adams (of the Oregon Milk Control Board) says that this crisis resulted chiefly from a sharp price lift for milk on part of nearby condenseries. Numerous producers were lured from the Portland market and its very stringent sanitary code—administered by the city health department. There was a sharp drop in the number of producers on the milk board's list, and most of the deserters never have returned to this market.⁶

The average price paid producers by condenseries in the Northwestern States rose from \$1.11 per hundredweight in August 1935 to \$1.66 per hundredweight in August 1936, an increase of 55 cents, or 50 percent. This increase was part of a general increase in dairy prices resulting from reduced supplies due to drought. The average price paid producers by condenseries for the United States increased from \$1.18 in August 1935 to \$1.74 in August 1936, or 56 cents, as compared with 55 cents for Northwestern States. During this period the average price paid by milk dealers in the Pacific Coast States for milk used for city distribution as milk and cream rose from \$1.68 to \$1.95, an increase of 27 cents, or 16 percent. By August 1938 the price paid by condenseries had fallen to \$1.07 per

⁶ Oregon Voter, Nov. 26, 1938, p. 20. The Oregon Voter is a weekly publication published in Portland devoted largely to public affairs. The editors have no apparent special interests in milk control, and an attorney for the milk control board agreed that this article gave a fair description of the situation.

hundredweight, and this decline in price increased the difficulty of the control board in maintaining the price of milk used for fluid uses. This partial differentiation of the total milk production of an area because of different sanitary requirements must be considered, especially in an area where only a small portion of the total production is used as fluid milk and cream by city consumers.

First among seven requirements for the ideal and equitable method of handling surplus on a fluid milk market, W. H. Henry, secretary-manager of the Dairy Cooperative Association, an association of milk producers supplying the Portland market, places "comprehensive city ordinance governing the production of milk." Such an ordinance, he says, "is essential in controlling surpluses and making reasonable returns to the producer." He elaborates this by adding: "In order to curb the 'in and outers' on a fluid milk market it is necessary to have a stringent city health ordinance governing the production of market milk. This helps to curb overproduction, especially in the flush season, and practically eliminates those who are not primarily market milk shippers."⁷ The reference to curbing overproduction, especially in the flush season, suggests a characteristic of certain Oregon markets that must be considered in evaluating public regulation, namely, the great seasonal variation in the production of milk. The county agent of one county testified that the variation in normal production from the low month to the high month for his county was about 1 to 8.⁸

THE BACKGROUND OF PUBLIC REGULATION

Low prices paid producers supplying milk for fluid use to the Portland market were the immediate cause of public regulation in Oregon. These prices fell sharply during 1932 and reached a low point during 1933. Efforts were made to organize milk producers supplying the Portland market into a cooperative during the early 1930's, and the Dairy Cooperative Association was organized and started to operate in August 1931. Higher prices were demanded of the distributors, and it was reported that one large distributor bought as much of his milk as possible from nonmember producers and bought only what he had to from the Dairy Cooperative Association. In order to enforce their demands for higher prices, farmers withheld milk from the market, and during the milk strike there was some violence and violation of law. The situation has been described as follows:

Oregon's Milk Control Act was adopted primarily to stabilize and strengthen our great dairy industry, said to represent an aggregate investment totaling \$200,000,000.⁹ It followed some years of demoralization and vigorous attempts at quasi-voluntary control, which culminated with the unsuccessful reign of a milk czar. The public, much more passively interested, has quite forgotten the milk wars and milk dumping. Conditions of 1931-33 are called to mind by reference to the Milk Control Act, passed by the second special session of 1933. Price

⁷ W. H. Henry, *Equalizing Surplus Burdens Through Public Control*, American Cooperation, 1938, pp. 298-299.

⁸ Public hearing, Tillamook County, Oreg., April 25, 1939.

⁹ There is no indication that the writer was aware of the fact that the act directly affected only a fraction of the total industry.

disparity, it stated, has broken down the orderly production¹⁰ and marketing of milk and cream and has seriously impaired the agricultural assets supporting the credit structure of the State and the local political subdivision thereof.

Now note the entrance of the envisioned need for policing of the dairy industry, "Whereas unhealthful, unfair * * * demoralizing economic trade practices have grown up * * * which impair the industry in the State and the constant supply of pure wholesome milk to the inhabitants thereof and constitute a menace to the health and welfare of the inhabitants of the State; and whereas, in order to protect the well-being of the people of the State of Oregon and promote the public welfare, the production, transportation, manufacture, storage, distribution and sale of milk and cream in the State hereby is declared a business affecting the public health and interest which should be supervised and controlled in the manner herein provided."

Any attempt at this late date to ascribe the milk law's origin to scheming distributors or wholesalers or other "big interests" is wide of the truth. The law actually was the legislators' response to woeful complaints of the bedeviled dairymen, whose industry was demoralized and whose investments were evaporating in losses.¹¹

The price paid producers for milk used as fluid milk and cream in Portland is shown in chart II, and appendix to chapter II, comparative prices for Seattle, Wash., the nearest large city, are also shown in appendix to chapter H. Prices paid producers fell sharply during 1932 and reached the lowest point since 1920 in 1933. Prices were advanced from the low point with the introduction of public regulation late in 1933 and have been relatively stable since then.

The "milk czar" referred to in the above quotation was designated as arbitrator when some threat of milk shortage developed in the Portland market as a result of the milk strike. His legal advisor is now one of the attorneys for the control board and was undoubtedly instrumental in drafting the Oregon Milk Control Act.

THE MARKET STRUCTURE

The Dairy Cooperative Association was not organized until mid-1931. It appears that prior to this time the producers on the market had been unorganized and were dealing largely as individuals directly with the several distributors. In addition to the producers selling to distributors there was apparently an appreciable number of producer-distributors—that is producers who were marketing their milk directly to consumers. During 1937 about 7 percent of all the milk produced in Oregon was retailed by the farmers who produced it.

In the fall of 1938 practically all of the producers selling to distributors on the Portland market were members of one of the three producer associations supplying the Portland market. The number of nonmembers supplying the market was reduced during the period of

¹⁰ Total production of all milk on farms in Oregon for the past 10 years has been—

Year	Million pounds	Year	Million pounds
1929	1, 199	1934	1, 364
1930	1, 265	1935	1, 365
1931	1, 291	1936	1, 333
1932	1, 284	1937	1, 336
1933	1, 290	1938	1, 350

From reports of the Bureau of Agricultural Economics, U. S. Department of Agriculture.

In July 1938 the secretary-manager of the Dairy Cooperative Association of Portland read a paper at the American Institute of Cooperation on "Equalizing Surplus Burdens Through Public Control." This paper gave no indication that there was danger of not having enough milk; rather, the problem was posed as one of distributing the burden of the surplus equitably among all producers.

¹¹ Oregon Voter, November 26, 1938, p. 14-16.

CHART II
Fluid Milk Prices in Portland, Oreg., 1920-39

CENTS PER
QUART

1.8

1.6

1.4

1.2

1.0

0.8

0.6

0.4

0.2

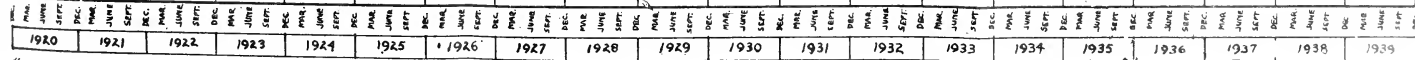
0

RETAIL PRICE - House Deliveries

GROSS MARGIN

PRICE PAID PRODUCERS

.... Prices not listed
* At farms



control by producers withdrawing from the market or by joining a producers' association. In addition to the producers who sell to distributors there are about 90 producers distributing their own milk on the Portland market.

The Dairy Cooperative Association adopted the base-surplus plan of paying producers in October 1931, 2 months after the organization started to operate. During the first year the average of each producer's shipments in August and September was used as his base. Later the average of the 5 low months was used as the base, regardless of which months those were.¹² The fact that the Dairy Cooperative Association adopted the base-surplus plan suggests that, at least during certain seasons there was more milk produced under conditions approved by the city health department than could be sold as fluid milk and cream; and that the "surplus" problem was a serious one on the Portland market. The secretary-treasurer of the association stresses that, "uncontrolled surplus in the hands of distributors is a threat to the stability of that market and always results in a decrease in price to the producers."¹³ Another difficulty caused by the "surplus" was that some producers would receive the price paid for milk used as fluid milk and cream for a larger proportion of their total milk sales than would other producers. As a result these farmers received a higher average price for their milk. Since the proportion of the total milk of the cooperative used as fluid milk and cream was smaller than that of producers selling directly to distributors, it was especially interested in some way of "equalizing surplus burdens."

THE OBJECTIVES OF REGULATION

In evaluating the objectives of the Oregon Milk Control Act it must be remembered that the regulation provided for in this law applies to only a portion of the total milk produced in Oregon. The law applies only to milk and cream used for human consumption in fluid form and one of the board members emphasized that the board had no control over milk for the manufacture of dairy products. Nevertheless the law states that—

the present economic emergency is in large part the result of the disparity between the prices of milk and cream and other commodities, which disparity has diminished the power of milk producers to purchase industrial products, has broken down the orderly production and marketing of milk and cream and has seriously impaired the agricultural assets supporting the credit structure of the State and local political subdivisions thereof.¹⁴

As already mentioned under the discussion of the situation which led to the legislation, the Milk Control Act states that conditions had developed "which impair the dairy industry in the State and the constant supply of pure, wholesome milk to the inhabitants thereof."¹⁵ Thus the alleged objectives of the Milk Control Act were—

1. To promote industrial recovery.
2. To support the credit structure of the State and its local political subdivisions (apparently the tax base).
3. To assure a continuous adequate supply of pure, wholesome milk.

¹² W. H. Henry, *Equalizing Surplus Burdens Through Public Control*, American Cooperation 1938, p. 300.

¹³ *Ibid.*, p. 299.

¹⁴ Oregon Milk Control Act, par. 2.

¹⁵ *Ibid.*, par. 3.

In commenting upon the first of these the Oregon Voter remarked:

It is readily recognized that prosperity for our lumber industry energizes and benefits our entire economy. In a lesser degree the same thing is true of the dairy industry.¹⁶

But no attempt was made to explain how causing city consumers in Oregon to pay higher prices for fluid milk and cream in order to increase the income of those Oregon dairy farmers who produced that milk and cream would increase industrial production.

With respect to the third object the "Oregon Voter" argued that as the price goes down "dairymen lose money, disperse their herds and quit: no new adventurers undertake the dairy business. Result: in the course of 2 years there is likely to be only enough milk to supply the community's needs during the flush production and in the off season a serious shortage develops."¹⁷

The experience of the depression suggests that dairying is one of the last alternatives of the farmer. Except for severe drought years milk production has increased during the depression. There may be, however, an alternative for the dairy farmer producing for a city fluid milk market with costly sanitary requirements. That alternative is production for manufactured dairy products. Thus the danger, if any, is of a shortage of milk produced under the specified sanitary regulations, not of a shortage of total milk supply, which again emphasizes the importance of considering sanitary requirements in a study of milk regulation.

A different objective is stressed by the secretary-manager of the producers' association. He says:

Section 13 is the heart of the law. It states in part "that to stabilize and promote the milk industry it is necessary that uniform prices be paid to all producers, who, either directly or through any cooperative or cooperative association, furnish milk to any specified market"—

and further—

to provide for the pooling and averaging of all returns from the sales of fluid milk produced in the geographical area from which fluid milk shall be produced for a designated market or sales area, and the payment to all producers of a uniform pool price for all milk so produced * * *¹⁸

To the cooperative association of milk producers the problem is one of being able to pay as high a price as received by the producer selling directly to a distributor who would buy only about as much milk as he can sell as fluid milk and cream. The cooperative, on the other hand, must accept all milk produced by its members and if it cannot dispose of all this milk as fluid milk and cream must dispose of the balance in manufactured dairy products usually at a lower price. Sanitary regulations which differentiate milk for fluid milk and cream from milk for manufactured dairy products or effective bargaining by a producers' association may raise the price of milk for fluid uses above the price for manufactured uses. In either case the amount of milk suitable for fluid uses will usually exceed the amount that can be sold as fluid milk and cream during part or all of the year and this necessitates selling the balance for manufactured uses. If, when this

¹⁶ Oregon Voter, November 26, 1938, p. 16.

¹⁷ Ibid. pp. 15-16.

¹⁸ W. H. Henry, *Equalizing Surplus Burdens Through Public Control*, American Cooperation, 1938, p. 303.

occurred, the price of the total supply fell to the price milk would bring in manufactured dairy products there would be no problem of "surplus" although the income of milk producers supplying the city market would probably be reduced. Attempts are made, therefore, to segregate the "surplus" and to sell this alone at a lower price, while at the same time holding up the price of fluid milk and cream. This makes it to the advantage of each producer to get as large a portion as possible of his milk used as fluid milk and cream and raises the problem of "equalizing surplus burdens."

THE CONTROL ACT

Responsibility for carrying out the provisions of the Milk Control Act rests with a milk control board of three members. This board was created by the Milk Control Act and administering the milk control legislation is the sole governmental function of the board. It is provided that the director of the department of agriculture shall act as executive secretary of the board, but he is given authority to designate some member of his staff to act in his place. The members of the board are appointed by the Governor and may be removed at any time. One member shall be from each of the three congressional districts of Oregon. No member of the board shall be a milk dealer or producer as defined by the milk control bill nor shall any member have any financial interest in any enterprise carrying on business as a milk dealer or producer. Members of the board are not full-time employees of the State, but are paid for each day actually spent in the performance of official duties. The detailed work of administering the Milk Control Act is carried on by a full-time staff of office and field workers under the direction of an "administrator."

There has been one complete change in the membership of the board since the law was passed in late 1933. The tenure of the first board was from late 1933 to the middle of 1935. The board was given the duty of initiating what was probably one of the most complete systems of milk regulation ever attempted upon a market which until rather recently had not had even the discipline of a producers' cooperative association, and in which some distributors at least had apparently attempted to hamper the organization of a producers' cooperative. One evaluation of this board's work is that "its main fault seemed to be an ineptness in dealing with the chiseler, so common in the business."¹⁹

In addition to the one complete change in board membership there has been an additional change in the chairmanship of the board, and also a change in administration. With this change in the chairmanship early in 1939 an examination of the standards used in the administration of the milk control legislation was begun. An agricultural economist was employed by the board, to work independently of the administrative office, to make studies of production and distribution costs in various markets in Oregon. This work is being continued and may considerably modify the standards used by the board.

¹⁹ Oregon Voter, November 26, 1938, p. 18.

CONTROL DEVICES

The control devices available to and used by the Oregon milk control board are—

1. The licensing of milk dealers.
2. The establishment of marketing areas.
3. The establishment of "milk-sheds" or territorial areas within which milk may be produced for sale in any given marketing area.
4. The allocation of quotas to producers and the regulation of the sale or transfer of these quotas.
5. The establishment and regulation of market pools.
6. The fixing of minimum prices.

Licensing of Milk Dealers.

In section 4 of the Milk Control Act it is provided that, "no dealer shall buy milk from producers or others for sale within the State, or sell or distribute milk within the State, unless such dealer is duly licensed so to do as provided in this act." It is provided further (sec. 9) that the board may classify licenses and issue licenses to dealers to store or manufacture or sell milk limited to a particular city or village or to a particular market or markets within the State. Licensees are required (sec. 10) to keep adequate books and records and all information that the board may deem necessary for the proper enforcement of the act.

Establishment of Marketing Areas.

The board may define what shall constitute a natural market area. "A market area shall include no more than one city or town. Together with the contiguous territory within a reasonable distance around the same, where marketing conditions are the same, unless two or more towns or cities are so closely adjacent to one another that they comprise but one natural market area and are subject to the same marketing conditions, in which event, such two or more adjacent towns or cities together with the contiguous territory around the same as heretofore defined, may be included in one marketing area. Each market area, and production area from which the same is supplied, shall include only that territory in which the conditions involved in the production, processing, and distribution of milk are similar. A separate order of the board in the establishment of minimum prices * * * shall be made for each sales and production area."

Establishment of Milk-sheds.

This is perhaps the most nearly unique feature of the Oregon plan of milk regulation. In section 13 of the Oregon Milk Control Act the board is given power "to define and limit the geographical area from which the fluid milk shall be produced for any given market or sales area as fixed and designated by the board."²⁰

The "market" and "production areas" can be illustrated by the order covering the Portland market.

"The 'Portland sales area' means the area within the corporate limits of the city of Portland and the area within lines paralleling the boundary lines of the city of Portland drawn 3 miles distant

²⁰ Oregon Milk Control Act, secs. 9 and 13.

outside therefrom and the extension of such lines necessary to enclose the area, excluding, however, any territory in the State of Washington."

"'Production area' means the territory lying within the area enclosed within lines paralleling the Portland sales area drawn 30 miles distant outside therefrom and the extension of such lines necessary to enclose the area together with the premises maintaining herds, the milk or cream from which was being lawfully offered for sale within the sales area as herein defined on December 15, 1933, or 60 days prior thereto." ²¹

Only milk produced within the "production area" can lawfully be offered for sale within the corresponding "market" or "sales" area. Furthermore, all milk produced within the production area cannot be lawfully offered for sale within the market area even though it is produced under conditions that fully satisfy all sanitary requirements of the market. In addition to being produced within the sales area, it must be produced by a producer who has been allocated a producer's individual quota by the milk control board.

Allocation of Quotas.

"The term quotas means the total number of daily pounds butterfat which, in the judgment of the board, is required to meet the bottle and can sales in the market together with an additional amount of butterfat pounds of approximately 10 percent above said total, to take care of the fluctuating demands of said market. A producer's individual quota is the privilege allotted to said producer to share in the proceeds of the bottle and can sales in the market and his correlative duty to supply the demands of such bottle and can sales and the reasonably necessary surplus, under the regulations contained in this order." ²²

The establishment of production areas and the allocation of quotas are the core of the Oregon plan of milk regulation. In essence, certain milk producers were given the exclusive right to supply a given market with fluid milk and cream. They are protected from competition from other producers and a minimum price must be paid to them for that portion of their total milk production that is used for fluid milk and cream. They are not assured, however, that any given amount of their milk and cream will be used as fluid milk and cream. Furthermore, the producer is required to supply his share of the total milk and cream supply or his quota will be reduced. Any producer having a quota in the Portland production area, whose output during the 4 months of lowest production does not equal his allotted quota will have his quota reduced in the following year. Producers who fail to meet the sanitary requirements of the market for a period of over 30 days also lose their quotas.

The quotas are fixed from time to time as conditions seem to warrant. For example, Official Order No. 105 of the Oregon Milk Control Board, dated March 1, 1936, sets quotas "for the year 1936 or until this order is amended, modified, or changed." Official Order No. 105 was repealed by Official Order No. 121, which became effective June 1, 1939. This order continued the then existing quotas of old producers until May 31, 1940, and provided rules for the annual

²¹ Official Order No. 121, Oregon Milk Control Board, p. 3.

²² *Ibid.*, p. 4.

adjustment of quotas if during the year the quantity of total sales of fluid milk and cream was substantially different from the total quotas of all producers. The board feels that it is important that total quotas be kept substantially equal to total sales of fluid milk and cream. If total sales are either 10 percent above or below total quotas, adjustment in total quotas is made. In general, the regulations covering adjustment of quotas provided for equal percentage reduction in the quotas of each individual producer, if a reduction in total quotas is necessary. If sales exceed quotas by more than 10 percent, each producer is given an additional quota based upon the amount of milk he produced the previous year in excess of his quota. This provision for allotting additional quotas on the basis of production in excess of quotas suggests that the Oregon plan makes no effort to control total production of milk.

Quotas of old producers can be increased and quotas can be allotted to new producers only if quotas are available because some producers have lost their quotas or if the total quota for the market has been increased because of an increase in the total sales of fluid milk and cream on the market. Up to about mid-1939 the individual producer who was allotted a quota owned that quota in about the same way that he owned other real or personal property. He was free to transfer his quota to another producer who could meet the requirements of the health department of the city of Portland and the regulations of the milk control board. Recent orders of the milk control board place rather rigid limitations upon the right of the individual producer to sell or transfer his quota. These regulations were the result of criticism of the board which arose from the fact that producers were selling their quotas to other producers. This was taken to be an indication that the board was creating valuable property rights by granting certain producers monopoly privileges.

In general the regulations covering the transfer of quotas provide that such transfer can be made only when there is a bona fide sale of the farm or of the equipment, herd, and license, or of both. The quota under the new regulation is, in general, attached to the farm or to the herd and equipment rather than to the man. In each transfer the purchaser must agree to continue to serve the market if he is to retain the quota.

Cooperatives are protected by a provision in the Portland order which provides that any member of a cooperative association who desires to transfer his quota shall first obtain written consent of such cooperative association to such transfer before such transfer may be approved by the board.

Establishment and Regulation of Market Pools.

Obviously the quantity of milk and cream purchased by consumers will not be constant from day to day. This is recognized by the Oregon Milk Board when it determines the total quotas for the market, for it allows an additional amount of butterfat of approximately 10 percent above what it considers sufficient to meet the requirements of the fluid milk and cream trade. This additional 10 percent is to "take care of the fluctuating demand of said market."²³ This means that under most conditions the total of the "quotas" will exceed the total of the sales of fluid milk and cream.

²³ Ibid., p. 4, par. (p).

Even though this excess of total quota over what is actually purchased by consumers is necessary because of unpredictable fluctuation in consumer purchases, distributors are not charged for such surplus at the price charged for milk used as fluid milk and cream but rather at the lower price charged for milk used for manufactured dairy products. This appears to be common practice in fluid milk markets and is justified on the ground that the distributor realizes less on milk sold as manufactured dairy products than he does for milk sold as fluid milk and cream. This view is held despite the fact that this extra milk is necessary to meet the fluctuating demands of consumers and that the products made from this milk might therefore be considered by-products of the fluid milk business and the raw material going into these by-products should be paid for at the same price as the raw materials going into the main product—fluid consumption. This situation, of course, arises from the differentiation, by sanitary or other requirements, of the total milk supply into milk used for fluid milk and cream and milk used for other purposes.

Because of this practice of paying for milk actually used as fluid milk and cream at one price and for milk used for other purposes at another price the average price received by a producer will depend upon the proportion of his total milk deliveries going to each of these two uses. Since this proportion usually varies from distributor to distributor and especially between producer-distributors and distributors, a method of equalizing returns among all producers having quotas is a part of the Oregon plan of public milk regulation. In this connection, it should be recalled that the secretary-manager of the largest producers' cooperative on the Portland market has called section 13 of the Oregon law, which provides for "the payment to all producers of a uniform pool price" the heart of the law.

To assure that every producer supplying a given market area receives the same average price for all milk delivered up to the limit of his quota, the Oregon Milk Control Board has established and regulates two pools for each market—a "basic pool" and a "surplus pool." The basic pool covers all milk delivered by producers up to the limits of their quotas, whether sold as fluid milk or as milk used for manufactured products. The surplus pool covers all milk delivered by farmers in excess of their quotas. The basic pool is credited with all sales of milk for fluid milk and cream at the price fixed by the board, unless the total sales exceed the total quotas, in which case the excess is credited to the surplus pool. The basic pool is also credited with any milk under the quota which is sold for manufacturing uses. This credit to the basic pool is at a lower price. The sum of these two credits divided by the total number of pounds delivered under quotas gives the average price to be paid each producer for his deliveries up to the limits of his quota.

If the sales of fluid milk and cream equal or exceed the amount of the quotas of all producers, the average price for the basic pool would be the price fixed by the board for milk used for fluid milk and cream. Ordinarily, sales will be less than the total quota and the average price for the basic pool will be less than the price set by the board for milk used as fluid milk and cream. Furthermore, some distributors, and especially producer-distributors, will sell a larger proportion of their milk under quota as fluid milk and cream than will other distributors. Since such distributors are required to pay their producers only the

average basic pool price, there will be an excess of receipts over payments. This excess must be paid into an equalization account of the board. Then the board makes payments out of this excess to distributors who have a deficit of receipts over payments to producers because the proportion of milk under quota which they sold as fluid milk and cream was less than the average proportion for the whole market.

All milk delivered by producers in excess of their quota is credited to the surplus pool at the price for which it is sold, whether as fluid milk and cream or for manufactured uses. Total credits to the surplus pool are divided by total pounds of butterfat in the surplus pool to determine the average price paid to producers for milk delivered in excess of their quotas.

Total sales of fluid milk and cream could exceed the total quotas if there were an appreciable increase in sales of fluid milk and cream. Receipts from sales of fluid milk and cream in excess of total quotas would be credited to the surplus pool. There is no limit upon the amount of milk that can be sold as fluid milk and cream provided the established resale prices are charged. The individual's quota is merely the extent of the privilege allotted to each producer to share in the proceeds of the bottle and can sales of fluid milk and cream. The Oregon Board does not distinguish between butterfat sold as fluid milk and butterfat sold as fluid cream, so there is no class I and class II milk, and it insists that it has authority only over butterfat in milk sold as either fluid milk or fluid cream.

For the year 1938 the total allotted quotas amounted to 12,900 daily butterfat pounds on the Portland market. This was about 10 percent in excess of the average daily sales. Had consumers been willing to buy more milk at the established prices, production in excess of quotas could have been sold as fluid milk and cream. But producers with quotas would "share" in these sales only to the extent of their quotas. The receipts from the excess sales would have been credited to the "surplus pool" rather than to the "basic pool" and the proceeds to the "surplus pool" are distributed in proportion to total production in excess of "quota" rather than in proportion to "quota." The following year this situation would have been changed by increasing the "quotas."

The following example furnished by the pooling agent of the Oregon Milk Control Board, illustrates the way in which prices paid to producers are determined under the Oregon plan of "basic" and "surplus" pools. The illustration assumes four producers with different quotas, but each of whose production for the month happens to be the same—100 pounds of butterfat. Production and quotas for each of the four producers were:

	Producers				Total
	A	B	C	D	
Production.....	Pounds 100	Pounds 100	Pounds 100	Pounds 100	Pounds 400
Quota.....	100	95	85	80	360
Excess.....		5	15	20	40

Total sales of fluid milk and cream for the month were equivalent to 350 pounds of butterfat or 10 pounds less than the total quota. The distribution of these sales among the four groups and receipts from these sales were:

Producers	Sales	Price	Receipts
	<i>Pounds</i>		
A.....	100	\$0. 67	\$67. 00
B.....	90	. 67	60. 30
C.....	90	. 67	60. 30
D.....	70	. 67	46. 90
Total.....	350	. 67	234. 50

Producer A's sales were equal to his quota. But total sales were less than total quotas and hence this distributor has to share a part of his total receipts with other producers where sales were less than their quotas. This producer represents the usual producer-distributor. Producer-distributors have resented this sharing of their receipts and the Board by amendment to Official Order 121 limited the equalization payments of producer-distributors as follows:

Provided, however, When accounting to producers participating in the basic and surplus pools as herein established, that when the surplus within the basic pool as herein defined, exceeds by 5 percent or more all delivered quotas on the market, the producer-distributors participating in said pools shall only make equalization payments, if the accounting so requires, up to 5 percent of such surplus and no more. For example, should there be an average surplus within the quotas in any one period of 10 percent, the equalization payments required to be paid by the producer-distributors in said pooling period shall be computed as if the said surplus within the said quotas is only 5 percent and no more.

Producer D with a relatively large surplus probably is representative of the position of the largest producers' organization on the Portland market.

Receipts from the sale of milk sold for other than fluid milk or fluid cream and total receipts were:

Producer	Sales	Price	Receipts	Total receipts
	<i>Pounds</i>			
A.....		\$0. 45		\$67. 00
B.....	10	. 45	\$4. 50	64. 80
C.....	10	. 45	4. 50	64. 80
D.....	30	. 45	13. 50	60. 40
Total.....	50	. 45	22. 50	257. 00

Thus there is a total of \$257, less a deduction of one-fourth cent per pound of butterfat which is \$1, or a net of \$256 to be distributed among the producers. The "basic" pool is credited with all receipts from the sale of fluid milk and fluid cream since the total of such sales were not in excess of total quotas. This pool is also credited with receipts from the sale of an amount of milk for manufacturing uses equal to

the amount by which sales of fluid milk and cream are less than total quotas. The basic pool is—

Sales of fluid milk and cream, 350, at \$0.67.....	\$234. 50
Sales of milk for manufacturing uses, 10, at \$0.45.....	4. 50

Total.....	239. 00
Less $\frac{1}{4}$ cent on 360.....	. 90

Total.....	238. 10
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This results in an average price of 66.139 cents for all milk delivered within the limit of the quotas.

The "surplus" pool is—

Sales of milk delivered in excess of quotas, 40, at \$0.45.....	\$18. 00
Less $\frac{1}{4}$ cent on 40.....	. 10

Total.....	17. 90
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This results in an average price for milk delivered in excess of quotas by \$44.75.

The amounts due each producer are—

Producer A:

For quota, 100, at \$0.66139.....	\$66. 14
For surplus.....	-----

Total.....	66. 14
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This is 86 cents less than his receipts so he must pay 86 cents into the equalization account.

Producer B:

For quota, 95, at \$0.66139.....	\$62. 83
For surplus, 5, at \$0.4475.....	2. 24

Total.....	65. 07
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This is 27 cents more than his receipts so he will receive 27 cents from the equalization account.

Producer C:

For quota, 85, at \$0.66139.....	\$56. 22
For surplus, 15, at \$0.4475.....	6. 71

Total.....	62. 93
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This is \$1.87 more than his receipts so he will pay \$1.87 to the equalization account.

Producer D:

For quota, 80, at \$0.66139.....	\$52. 91
For surplus, 20, at \$0.4475.....	8. 95

Total.....	61. 86
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This is \$1.46 more than his receipts so he will receive \$1.46 from the equalization account.

The effect of this pooling arrangement is to distribute the receipts from the sale of milk as fluid milk and cream among producers in proportion to their quotas. To receive a large share of these receipts a producer must secure a large quota. Each producer receives the same average price for all milk delivered within the limits of his quota, regardless of how much of the milk is actually sold as fluid milk and cream, except for the limitation placed upon the extent to which producer-distributors must pay into the equalization account.

Likewise the surplus pool assures a uniform price per pound to each producer for all milk sold in excess of quota.

Fixing of Minimum Prices.

The Oregon Milk Control Board is directed to—

fix minimum wholesale and retail prices to be charged for milk handled and sold within the State for human consumption in fluid form, and including the following classes:

- (a) By producers or associations of producers to milk dealers.
- (b) By milk dealers to stores for consumption on the premises, or for resale to consumers or to others.
- (c) By stores to consumers or to others except for consumption on the premises where sold.
- (d) By producer-distributor and distributor for deliveries to homes of consumers.²⁵

These six control devices available to and used by the Oregon Milk Control Board give the board rather complete control over the production and distribution of milk in Oregon markets. The board's control over the production of milk seems to be about as great as the control of other regulatory agencies over public utilities. There may be one important difference in that the Oregon Milk Control Board has the right to fix only minimum prices to be charged by producers and distributors. It apparently is not the intent of the law to give the board power to establish maximum prices, and the orders of the board establish minimum prices. One paragraph of section 12 of the law, however, does declare that "it shall be unlawful to buy or offer to buy, or to sell or offer to sell, any milk at prices other than the prices fixed by order of the board." So far, the effect of fixing minimum prices to producers has been to establish the price actually paid although it appears that the board recently has been inclined to set minimum retail prices which will be somewhat below the retail prices actually in force.

By establishing production areas and by granting to or withholding quotas from producers, the board can determine what producers shall supply a given sales area with fluid milk and cream. This is very similar to granting a franchise to a company giving that company the sole privilege and duty of supplying a given area with some public utility service. The Oregon Milk Board grants to certain producers the exclusive privilege of supplying a given sales area with fluid milk and cream and establishes the minimum price which the distributors must pay producers for such fluid milk and cream.

Apparently the board has similar jurisdiction over the distribution of milk, but it is not evident that it has exercised the same control over the entrance of distributors into the market that it has exercised over the entrance of new producers. A new producer is allotted a quota only if there is an expansion in total sales of fluid milk and cream on the market or if certain old producers have lost or surrendered their quotas. New producers are not permitted to compete against old producers for a part of the market.²⁶ While the board has instituted very rigid restrictions upon the entrance of new producers into the market, it is not clear that any such restrictions have been placed upon the entrance

²⁵ Oregon Milk Control Act, sec. 12.

²⁶ "It is further ordered as to any increase of quotas to old producers, and any allocation of quotas to new producers shall only be made if there is available either lapsed quotas or that the sales in the bottle and can trade on the market have substantially increased. If there is neither lapsed quotas nor increased sales, there shall be no allocation or increases of quotas to the respective producers on the market." Official Order No. 121 Oregon Milk Control Board, p. 7.

of distributors even though the power to license distributors might give the board as much power as it derives through allocation of quotas to producers.

In discussing the advantages of restriction upon the number of producers as contrasted with restriction upon the number of distributors, a member of the Oregon board has said with respect to restriction on the number of producers:

Another benefit that accrues to a cooperative operating in a completely regulated market is that the number of shippers is restricted, as well as the area from which they may ship. It is needless to point out the experience of many markets in which a cooperative has signed up all or nearly all of the producers only to find at a later date that some distributor has gone out and brought in new shippers from a different area. These new shippers were not needed in the market but were brought in for the purpose of creating a difficult situation. This has resulted in an ever increasing accumulation of surplus milk in the hands of the cooperative. As the surplus increased, the pay-out to the members decreased, and this has resulted in dissatisfaction among the membership.²⁷

And with respect to limitation on the number of distributors:

Of direct interest to the bargaining cooperatives are the distributors' spreads that are allowed by the control board. As the spread is narrowed down, the number of processors that can survive continually decreases. If the spread is too narrow, a large number of distributing organizations eventually pass out of the picture. When this occurs, there are bound to be losses arising out of bad debts which will reduce the pay-out to the producers. A reduction in the distributor's spread will tend toward monopoly which is frowned upon by the consumers.

Many economists are of the opinion that as the distributing units decrease efficiency should increase, thereby permitting the consumer to secure his product cheaper, or the producer to receive more for his production, or the distributor to make a greater return on his investment. This may or may not be true depending upon a number of conditions, not the least of which is the attitude of labor. Labor is going to be a factor of great importance over the next few years and one that is going to require study and understanding on the part of both cooperative organizations and control agencies. As the number of distributors decrease and the market becomes more monopolistic, labor generally becomes more exacting in its demands.²⁸

STANDARDS

Licensing of Dealers.

While the Oregon Milk Control lists seven reasons for which the board may decline to grant, or may suspend or revoke a dealer's license, it sets up no standards for the granting of a license. The seven reasons mentioned seemed to apply to dealers already in the market, and they have no reference at all to capacity, prices or efficiency in distribution. Nor is there any evidence that the board has used its power to license dealers as a control measure to any such extent as it has used its power to allot quotas to producers for the control of milk sales by producers. Orders of the Oregon Milk Control Board provide "that no distributor who is now duly licensed as a milk dealer in said marketing area shall be permitted, without the consent of the board first obtained, and without showing just cause and necessity, to divert or change serving the markets now being served by him to any other market outside of said marketing area." This ruling probably would not prevent new dealers from obtaining licenses.

Establishment of Market Areas.

It is provided in section 9 of the Oregon milk control act that "each market area, and production area from which the same is

²⁷ A. E. Engbretson, The future outlets and outlook for fluid milk under public control, American Cooperation, 1938, pp. 278-279.

²⁸ Idem.

supplied shall include only that territory in which conditions involved in the production, processing and distribution of milk are similar." This provision was added in 1939 to the original legislation of 1933 as amended in 1935. Originally the entire State, except for certain specified markets, was included in one market area. In practice this provision will apparently result in whole counties or parts of counties being designated as production areas.

Allocation of Quotas to Producers.

The power to "define and fix the limits of the milkshed or territorial area within which milk shall be produced to supply any such marketing area" is one of the most important of the powers of the Oregon Milk Control Board. By defining the production and sales area as "the territory lying within the marketing area, the milk and/or cream from which was being lawfully offered for sale within the marketing area" on some specified date the Board has limited the production of milk to certain producers, and the standard for selecting these producers becomes the historical fact of whether or not these producers were selling fluid milk on the market as of a given date. This is the only standard suggested by the law which provides (sec. 9) "that producers, producer-distributors, or their successors shipping to any market on December 15, 1933, may continue so to do until they voluntarily discontinue shipping to designated milkshed."²⁹

Another standard for granting a producer the right to sell fluid milk on a given market is the distance his farm is from that market. For example, the "production area" for the Portland market is defined as—

the territory lying within the area enclosed within lines paralleling the Portland sales area drawn 30 miles distant outside therefrom and the extension of such lines necessary to enclose the area together with the premises maintaining herds, the milk or cream from which was being lawfully offered for sale within the sales area as herein defined on December 15, 1933, or 60 days prior thereto.³⁰

A producer outside this area can continue on the market so long as he remains on the same farm. If he moves, he must move within the area if he is to retain his right to sell fluid milk on the market. If the demand for milk increases so that new producers are required, only producers living within the market area receive consideration.

Allotment of Producer Quotas.

The first standard for allotting quotas is that the producer's farm is within the "production area."³¹ The second is that the producer has been selling fluid milk or cream on the market.

A recent order of the Oregon Milk Control Board contains the following paragraph:

All producers and producer-distributors who have maintained herds upon premises located within said Benton County market area, the milk and/or cream from which was being lawfully offered for sale in the bottle and can trade within the said area on January 1, 1938, and who have not since said time voluntarily ceased to serve said market with fluid milk and cream suitable for human consumption, shall be considered as rightfully entitled to be upon said market.³²

²⁹ Official Order No. 124, p. 5. Oregon Milk Control Board.

³⁰ Official Order No. 121, p. 3. Oregon Milk Control Board.

³¹ The only exceptions are producers without the market area who on some specified date have been selling fluid milk or cream on this market.

³² Official Order No. 128, p. 6. Oregon Milk Control Board.

The producers are further protected by the following paragraph:

It is ordered that no distributor shall, without the consent of the board first obtained, and after a hearing has been duly held before said board, discontinue purchasing any part of his requirements in the bottle and can trade from producers who have been lawfully authorized to supply said distributors with his requirements, unless such producer has voluntarily ceased to ship his fluid milk and/or cream for a period of 10 days or that such producer has been degraded more than twice within a period of 60 days; likewise no distributor shall obtain any portion of his requirements in the bottle and can trade from any other producer not lawfully authorized by the board to sell his fluid milk and cream in said marketing area, unless due cause is shown therefor, and upon hearing held by the board.³³

A third standard is that the producer continue to serve the market:

A producer's individual quota is the privilege allocated to said producer to share in the proceeds of the bottle and can sales in the market and of his correlative duty to supply the demands of such bottle and can sales and the reasonably necessary surplus, under the regulations contained in this order.³⁴

Producers having quotas who voluntarily cease to market their milk as fluid milk or cream on their assigned market lose their quotas, and producers who fail by appreciable amounts to deliver their full quotas have their quotas reduced.

The chief standard for allowing new producers to enter the market is need either because of increased sales or withdrawal of old producers from the market.

If there is neither lapsed nor increased sales there shall be no allocation or increase of quotas to the respective producers on the market.³⁵

But even when increase in sales or withdrawal of old producers makes a new allotment of quotas necessary, the historical standard of having sold fluid milk or cream on the market is of first consideration. When the total basic quotas were increased 10 percent for the Salem market, it was ordered that:

Each producer and producer-distributor shall be entitled to increase his proper proportion of said 10 percent increase.³⁶

Minimum Prices.

The board shall ascertain what prices for milk in each locality and market area of the State will best protect the milk industry and insure a sufficient quantity of pure and wholesome milk in the public interest. The board shall take into consideration all conditions affecting the milk industry, including the price necessary to produce a reasonable return to the producers and to the milk dealers.³⁷

The standards used by the Oregon Milk Control Board in setting minimum prices are reasonable return to both producer and distributor, not unreasonable prices to the consumer, and costs of production and distribution. Two sections of the law specifically direct the board to consider costs. One section directs that:

In fixing minimum prices and the standards or grades to which they apply the board shall in each market area and production area take into consideration costs of production and distribution and the market conditions in the particular sales and production area to be affected by the order applying to such sales and production area.³⁸

Another section provides—

that based upon differences in cost of various services if any, the board, upon facts found by it, may establish differentials in prices between house-to-house

³³ Ibid., p. 6.

³⁴ Official Order No. 121, p. 4. Oregon Milk Control Board.

³⁵ Ibid., p. 7.

³⁶ Official Order No. 119, p. 5. Oregon Milk Control Board.

³⁷ Oregon milk control bill, section 12, p. 5.

³⁸ Idem.

sales by dealers, house-to-house deliveries by stores, and sales on credit and over-the-counter sales by stores for cash.³⁹

The orders of the board indicate that the board has used "cost-of-production" and "reasonable-return" in a very general way in fixing minimum prices. One of the orders of the board states with reference to the hearing held before the order was issued:

Documentary evidence was introduced by the staff employed by the board, in which information as to the cost of production and distribution of market milk and cream in said sales area was set forth. Auditors employed by the board presented studies relating to cost of distribution of various distributing plants in the said sales area, and other data and information bearing on the cost of producing fluid milk and cream for human consumption in said area.⁴⁰

A number of orders issued by the board during September and October 1939 contain a paragraph substantially as follows:

That the factors and conditions involved in this production, processing, and distribution of fluid milk and cream suitable for human consumption are similar in every part of the territory included within the boundaries of what is now designated as Tillamook County, Oreg. The factors considered and found to be similar throughout the cities, towns, and villages included within the boundaries, of said Tillamook County, Oreg., are the cost of land devoted to the production of fluid milk and cream suitable for human consumption; the price of cattle comprising the herds; the wages of hired help required on the farm; the cost of pasture and feed; the cost of maintenance of distributing plants for the processing and bottling of fluid milk and cream; the method and character of distribution of fluid milk and cream to the consumer by the distributors and producer-distributors.⁴¹

These same orders state that the board finds that the minimum prices established—

will insure an adequate quantity of pure and wholesome milk to meet the requirements of the public in said market; that it will afford a reasonable return to said producers in said market, and likewise will afford a reasonable return to the distributors for the distribution and processing of said milk in said market; that the minimum prices hereinafter required to be paid by the consumer are reasonable in light of the evidence and testimony bearing upon the cost of production and distribution of fluid milk and cream in said marketing area.⁴²

While the board has apparently used costs of production in some general way in arriving at minimum prices the specific method by which it applied costs to arrive at the actual prices established is not clear. In some instances, the board has apparently used other standards. An example is afforded by the store differential which was eliminated shortly after the second board came into office.⁴³ This differential was eliminated even though the law specifically provides that such differences in price may be established if based on differences in costs.

A member of the board in discussing this matter pointed out that if different prices were to be allowed for every difference in cost, there might be different prices for each individual producer, and that such an arrangement was obviously impossible. It could also be pointed out that the quota system adopted by the Oregon board might influence the accounting costs of producing fluid milk and cream. This quota system gives certain producers the exclusive right to supply certain markets with fluid milk and cream. Thus the costs of producing fluid milk and cream for that market are the costs of these

³⁹ Idem.

⁴⁰ Official Order No. 116, pp. 2-3. Oregon Milk Control Board.

⁴¹ Official Order No. 124, pp. 3-4. Oregon Milk Control Board.

⁴² Official Order No. 126, p. 7. Oregon Milk Control Board.

⁴³ The future outlets and outlooks for fluid milk under public control. A. E. Engbretson. American Cooperation, 1933, p. 279.

particular producers and since other producers are prevented from entering the market the costs of such other producers apparently cannot affect the cost of producing milk and cream on that market. Furthermore this right to produce fluid milk and cream for a market may acquire economic value, and if this right becomes attached to a farm it may increase the cost of that land and if this additional land cost is permitted in calculating cost of producing milk, such cost of production will be enhanced. Thus, if the board errs in setting the price of milk too high, the error may result in increasing the accounting costs of producing milk.

The quotas have acquired monetary value and in the past were being bought and sold. In 1939 the board found—

That a practice has developed in the said production and sales area whereby producers have engaged in the bartering and transferring of quotas for a monetary consideration which tends towards the creation of inequalities to producers and permits producers at times to avoid the duty to supply the market with a required quantity of wholesome fluid milk and cream for human consumption.⁴⁴

This finding resulted in extensive regulations covering the transfer of quotas which are in contrast to the earlier rule that "A producer with a quota may sell all or any portion thereof with or without the transfer of his herd * * *." This ruling was due in part to criticisms by the public arising from the sale of quotas and based upon the belief that the board had given monopoly privileges to certain milk producers. Thus public opinion is given consideration by the board.

The result might, of course, be to reduce costs if the board used its power of allotting quotas to restrict the number of producers, in such a way that the producers remaining on the market ~~did not~~ have to purchase additional quotas and thus add to their costs. This, of course, is based upon the assumption that the smaller number of producers could produce the given quantity at a lower per unit cost—an assumption which is probably correct.

Finally, producer pressure has apparently been a standard sometimes used by the board, as indicated by the following:

The board found with respect to one county,

That in said areas there has been a general lack of cooperation and observance of the price orders issued and in effect in said areas

and

That, in the judgment of the board, to exempt said areas from the price orders and regulations of the board and the milk control law would for the present benefit the consuming public, the producer and distributor.⁴⁵

Upon careful consideration of all factors pertaining to the advisability of establishing quotas and pools and particularly after due consideration of the petition filed by producers, producer-distributors and distributors, the Board finds * * *.⁴⁶

Because of threats of litigation from the producer-distributor group, the equalization from producer-distributors in the basic pool applies only to a 5 percent surplus. If there is any surplus in the basic pool above the 5 percent, these producer-distributors pay no equalization on it.⁴⁷

⁴⁴ Official Order No. 121. Oregon Milk Control Board, p. 2.

⁴⁵ Official Order No. 123, p. 2. Oregon Milk Control Board.

⁴⁶ Official Order No. 123, p. 9. Oregon Milk Control Board.

⁴⁷ Equalizing surplus burdens through public control. W. H. Henry, *American Cooperation*, 1938, p. 302.

RESULTS

The secretary-manager of one of the producer-cooperatives in the Portland market reports that:

Milk control as administered in Oregon has resulted in better prices to all producers than could possibly be hoped for without it.

The milk control law also sets up a goal of equitable treatment of all producers on any particular market. Progress has been made toward this goal. We are still idealists enough to believe that further progress will be made toward that goal in Oregon.⁴⁸

This estimate of results is probably correct, if applied only to those producers who have been permitted to share in the fluid milk and cream sales of regulated markets. But this privilege has been rigidly restricted by the quota system used in Oregon. The producers who received quotas have undoubtedly been protected from the competition of other producers who might have been willing to supply milk and cream at lower prices than those established by the board. The number of producers supplying the Portland market has decreased since public regulation has been effective in that market, probably because certain producers found producing milk for the Portland market sufficiently profitable to make it worthwhile to purchase quotas from other producers. This suggests that the producers purchasing the quotas had lower costs of production, but this reduction in number of producers has not been accompanied by a reduction in price paid producers.

Thus far public regulation has had little apparent effect upon distribution except that the differential between the price of milk sold by stores as compared with the house delivered price has been eliminated. This has undoubtedly strengthened the competitive position of the retail route distributor. The fixing of resale prices also prevents price competition among distributors and may tend to maintain the gross margins between prices paid to farmers and prices paid by consumers. In the Portland market the margin appears to be slightly larger than it was just before regulation became effective, but about the same as it was during the early 1920's.⁴⁹

It is not evident that milk regulation in Oregon could have an appreciable effect upon general economic conditions in that State. It affects only a part of the total milk produced in the State and its principal effect is to transfer purchasing power from city consumers of fluid milk and cream to rural producers of these commodities. Since the number of consumers affected is considerably greater than the number of producers, it is possible for individual producer incomes to be appreciably increased without greatly affecting the individual consumer. This may explain why producers are actively interested in milk regulation while consumers show little interest, but it does not demonstrate how, if at all, the general economic situation will be modified by this transfer of purchasing power.

⁴⁸ Ibid., p. 303.
⁴⁹ fig. 1.

APPENDIX TO CHAPTER II

TABLES GIVING DATA ON MILK PRICES IN PORTLAND, OREG., AND SEATTLE, WASH.

TABLE I.—*Monthly average retail price of fluid milk (house deliveries) Portland, Oreg., 1920-39*¹

[Cents per quart]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920.....	15	15	15	13	13-14	13	13	14	14	14-14½	14½	14½
1921.....	14	14	14			12	12	12-13	12-13	12-13	12	12
1922.....	12	11	11	11	11	11	11	12	12	12	12	12
1923.....	12-13	12	12-13	12	12	12	12-13½	12	12	12-13	12	12
1924.....	12	11-12	11	11	11	11	11	11-12½	11-12	11	11	10-11
1925.....			11	10-12		11-12	11	11-12	11-12		12	12
1926.....	12	12	12	12-13	12-12½	12	12	12	12	11-12	12	12-13
1927.....	11-12	12	12	12	12	12	12		12	12		
1928.....	11-12	12		12	12	12	12	12-13				
1929.....				12	12	12	12	12	12	12	12	12
1930.....			12	12-15	12-15		12-15	12-15	11-15	11-15	10-12	
1931.....	11-12	10-12	11	10-11	10	10	10		9-11		9-11	10
1932.....	10	9-10	9	9	9	9	9	9	9	9	9	9
1933.....	9	9	9	9	9	9	9	8-9	9	9	9	9
1934.....	10	10	10	10	10	10	10	10	10	11	11	11
1935.....	11	11	11	11	11	11	10	10	10	10	10	10
1936.....	10	11	11	11	11	11	11	11	11	11	12	12
1937.....	12	12	12	12	12	12	12	12	12	12	12	12
1938.....	12	12	12	11	11	11	11	11	11	11	11	11
1939.....	11	11	11	11	11	11	11	11	11	11	11	11

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.

TABLE II.—*Monthly average price paid producers for milk (3.5 percent) used in fluid form for city distribution, Portland, Oreg., 1920-39*¹

[Cents per quart²]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920.....	8.2	8.2	8.2	6.6	6.6	6.6	7.3	6.6	7.4	8.4	7.4	7.4
1921.....	7.0	6.7	7.2			4.9	3.7	4.3	4.6	4.7	4.8	4.7
1922.....	4.8	4.3		3.9	3.8	3.8	3.8	4.6	4.4		4.8	5.0
1923.....	5.5	5.4	5.4	5.1	5.1	4.6	4.8	5.0	5.0	5.1	5.3	5.3
1924.....	5.2	5.0	4.8	4.7	4.1	3.9		4.0	4.0	4.0		4.3
1925.....			4.6	4.5		4.3	4.7	4.8	5.0		5.1	5.3
1926.....		4.9		4.6						4.9	4.8	5.0
1927.....	5.0	5.1	5.0	4.6		4.3	4.3		4.7			
1928.....	5.4							4.9				
1929.....												
1930.....				4.8	5.2		5.0	5.0	5.0	5.3	5.0	
1931.....	4.0	3.8	3.8	3.6	3.6	3.6	3.6		4.4		4.2	4.2
1932.....		4.0	4.0	3.6	3.3	3.3	3.3	3.3	2.8	2.8	2.8	3.3
1933.....	3.0	2.8	2.5	2.6	2.9	3.0	3.0	3.1	3.2	2.5	2.5	2.4
1934.....	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	4.2	4.2	4.2
1935.....	4.2	4.2	4.2	4.2	4.2	4.2	4.0	4.0	4.0	4.0	4.0	4.0
1936.....	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	5.1	5.1
1937.....	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1938.....	5.1	5.1	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1939.....	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market report.

² Price per cwt. divided by 46.5.

³ Price at farms.

TABLE III.—Gross margin between retail price of fluid milk (house deliveries) and price paid producers, Portland, Oreg., 1920-39¹

[Cents per quart]

Year	January	February	March	April	May	June	July	August	September	October	November	December
1920	6.8	6.8	6.8	6.4	6.9	6.4	5.7	7.4	6.6	5.8	7.1	7.1
1921	7.0	7.3	6.8			7.1	8.3	8.2	7.9	7.8	7.2	7.3
1922	7.2	6.7		7.1	7.2	7.2	7.2	7.4	7.6		7.2	7.0
1923	7.0	6.6	7.1	6.9	6.9	7.4	8.0	7.0	7.0	7.4	6.7	6.7
1924	6.8	6.5	6.2	6.3	6.9	7.1	7.1	7.8	7.5	7.0		6.2
1925			6.4	6.5		7.2	6.3	6.7	6.5		6.9	6.7
1926		7.1		7.9						6.6	7.2	7.5
1927	6.5	6.9	7.0	7.4		7.7	7.7		7.3			
1928	6.1							7.6				
1929												
1930				8.7	8.3		8.5	8.5	8.0	7.7	6.0	
1931	7.5	7.2	7.2	6.9	6.4	6.4	6.4		5.8		5.8	5.8
1932		5.5	5.0	5.4	5.7	5.7	5.7	5.7	6.2	6.2	6.2	5.7
1933	6.0	6.2	6.5	6.4	6.1	6.0	6.0	5.4	5.8	6.5	6.5	6.6
1934	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.8	6.8	6.8
1935	6.8	6.8	6.8	6.8	6.8	6.8	6.0	6.0	6.0	6.0	6.0	6.0
1936	6.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.9	6.9
1937	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
1938	6.9	6.9	6.9	6.3	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1939	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6

¹ Computed from tables I and II.TABLE IV.—Monthly average retail price of fluid milk (house deliveries), Seattle, Wash., 1920-39¹

[Cents per quart]

Year	January	February	March	April	May	June	July	August	September	October	November	December
1920	14	14-15	13-14	12		13	14	14	14	14		13
1921	13	10-12	13	13	12		12	12	13	12		10-12
1922	13	13	13	12	12	12	12	13	13		13	13
1923	13	13	13	13	12	12	12	12	13	13	13	10-12
1924		13		12	11	11	11	11	11	9	9	10
1925	10	12	12	12	12	12	12	12	13	13	13	13
1926	12	13	13			13	13	13	13		11	
1927	12		12	12	12	12	12	12	12	11-12	12	12
1928		12	12	12	12	11-12	11-12	10-12	12	10-12	12	
1929	12				12	12	12	12	12	12-13	13	13
1930	11-12	10-12	10-12	12	10		12	9-11	11	11	10-11	
1931	11	11	11	10-11	10-11	10-11	10-11	10-11	10-11	10-11	10-11	11
1932	10	10	10	9-10	10	10	10	9-10	9-10	8-9	8-9	8-9
1933	8-9	8-9	10	9-10	9-10	9-10	9-10	10-11	10-11	10-11	10	10
1934	10	10	10	10	10	10	10	10	10	11	11	11
1935	11	11	11	10	10	10	9	9	9	9	9	9
1936	10	10	10	9	10	10	10	10	11	11	11	11
1937	11	11	11	11	11	11	11	11	11	11	11	11
1938	11	11	11	11	11	10	10	10	10	10	10	10
1939	10	10	11	10	10	10	10	10	11	11	11	11

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service; Monthly Fluid Milk Market Report.

TABLE V.—*Monthly average price paid producers for milk (3.5 percent) used in fluid form for city distribution, Seattle, Wash., 1920-39*¹[Cents per quart²]

Year	January	February	March	April	May	June	July	August	September	October	November	December
1920.....	8.1	7.3	6.6	6.3	—	7.0	7.8	7.8	7.8	—	—	6.3
1921.....	5.9	5.4	6.1	6.2	5.5	—	—	4.6	—	5.3	5.9	5.9
1922.....	5.9	5.3	5.3	5.0	4.4	4.8	5.1	5.6	5.9	—	6.4	6.4
1923.....	6.4	6.4	6.4	6.4	5.3	5.3	5.6	5.8	6.4	6.4	6.4	6.4
1924.....	6.4	5.9	5.9	5.8	5.6	5.3	5.3	5.3	5.3	3.9	3.9	4.4
1925.....	4.5	5.5	5.3	5.2	4.9	5.1	5.3	5.8	6.0	6.1	6.3	6.3
1926.....	6.1	5.8	5.7	—	5.3	5.3	5.3	5.3	5.6	—	—	5.6
1927.....	6.0	—	6.0	6.2	5.6	5.4	5.4	5.5	6.0	6.0	5.9	5.9
1928.....	6.0	5.7	5.6	5.4	5.2	5.2	5.2	5.3	5.7	5.9	5.8	6.0
1929.....	6.0	—	—	—	5.2	5.2	—	5.5	5.7	5.8	5.8	6.0
1930.....	6.0	6.0	5.5	5.4	4.7	—	4.7	4.7	5.1	5.3	5.0	—
1931.....	4.2	4.1	4.2	3.9	3.8	3.8	3.8	4.0	4.2	4.3	4.3	4.3
1932.....	4.0	3.8	3.7	3.7	3.4	3.2	3.2	3.3	3.4	3.4	3.1	3.7
1933.....	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.6	3.6	3.6	3.6	3.6
1934.....	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	4.2	4.2	4.2	4.2
1935.....	4.2	4.2	4.2	4.2	3.8	3.8	3.3	3.3	3.3	3.3	3.7	4.0
1936.....	4.0	4.0	4.0	3.6	3.4	3.6	3.9	4.3	4.3	4.3	4.4	4.3
1937.....	4.3	4.3	4.3	4.6	4.3	4.2	4.2	4.3	4.3	4.5	4.4	4.5
1938.....	4.3	4.3	4.2	4.2	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.9
1939.....	3.8	3.6	3.7	3.6	3.6	3.6	3.6	3.6	4.3	4.3	4.3	4.3

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.² Price per hundredweight divided by 46.5.TABLE VI.—*Gross margin between retail price of fluid milk (house deliveries) and price paid producers, Seattle, Wash., 1920-39*¹

[Cents per quart]

Year	January	February	March	April	May	June	July	August	September	October	November	December
1920.....	5.9	7.2	6.9	5.7	—	6.0	6.2	6.2	6.2	—	—	6.7
1921.....	7.1	5.6	6.9	6.8	6.5	—	—	7.4	—	6.7	6.1	5.1
1922.....	7.1	7.7	7.7	7.0	7.6	7.2	6.9	7.4	7.1	—	6.6	6.6
1923.....	6.6	6.6	6.6	6.6	6.7	6.7	6.4	6.2	6.6	6.6	6.6	4.6
1924.....	—	7.1	—	6.2	5.4	5.7	5.7	5.7	5.7	5.1	5.1	5.6
1925.....	5.5	6.5	6.7	6.8	7.1	6.9	6.7	6.2	7.0	6.9	6.7	6.7
1926.....	5.9	7.2	7.3	—	—	7.7	7.7	7.7	7.4	—	—	—
1927.....	6.0	—	6.0	5.8	6.4	6.6	6.6	6.5	6.0	5.5	6.1	6.1
1928.....	—	6.3	6.4	6.6	6.8	6.3	6.3	5.7	6.3	5.1	6.2	—
1929.....	6.0	—	—	—	6.8	6.8	6.6	6.5	6.3	6.7	7.2	7.0
1930.....	5.6	5.0	5.5	6.6	5.3	—	7.3	5.3	5.9	5.7	5.5	—
1931.....	6.8	6.9	6.8	6.6	6.7	6.7	6.7	6.5	6.3	6.2	6.2	6.7
1932.....	6.0	6.2	6.3	5.8	6.6	6.8	6.8	6.2	6.1	5.1	5.4	4.8
1933.....	5.3	5.4	6.9	6.4	6.4	6.4	6.4	6.9	6.9	6.9	6.4	6.4
1934.....	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	5.8	6.8	6.8	6.8
1935.....	6.8	6.8	6.8	5.8	6.2	6.2	5.7	5.7	5.7	5.7	5.3	5.0
1936.....	6.0	6.0	6.0	5.4	6.6	6.4	6.1	5.7	6.7	6.7	6.6	6.5
1937.....	6.7	6.7	6.7	6.4	6.7	6.8	6.9	6.7	6.7	6.5	6.6	—
1938.....	6.7	6.7	6.8	6.8	7.4	6.4	6.4	6.4	6.4	6.3	6.3	6.1
1939.....	6.2	6.4	7.3	6.4	6.4	6.4	6.4	6.4	6.7	6.7	6.7	6.7

¹ Computed from tables IV and V.

CHAPTER III¹

REGULATION OF FLUID MILK MARKETING IN CALIFORNIA

Public regulation of fluid milk marketing in California is principally a matter of fixing the prices at which "fluid milk" may be purchased from producers and the price at which it can be sold to consumers. While "pooling" is permitted by the California law if "producers who supply distributors with not less than 65 percent of the total volume of fluid milk used for pasteurization purposes and who represent not less than 65 percent of the total number of such producers desire the establishment of such pool,"² no pools have been established. Thus, what was considered by many in Oregon to be the heart of the Oregon plan of milk regulation finds little if any place in the California plan. The reason for this is probably found in the requirement that 65 percent of the producers must desire a pool and the fact that most producers who consider that they have firm and satisfactory contacts with their distributors seem unwilling to agree to a market pool which may tend to lower their net returns, at least temporarily.³ Classification is also provided for by the California legislation but is used much less than in some States, although it is not used at all in Oregon.

"Fluid milk" is differentiated from manufacturing milk and is defined as any and all milk produced in conformity with the quality standards prescribed by the Agricultural Code for "market milk."

The constitutionality of the legislation was attacked because of this differentiation on the ground that such differentiation was discriminatory. The court in ruling against this contention noted that—

It is apparent, therefore, that the legislature has divided the milk industry into two classes, one class including all those engaged in producing, distributing, and consuming market or fluid milk and those dealing in manufacturing milk.⁴

The court justified this division on the ground that—

Fluid milk must be produced fairly close to the locality where it is consumed. The time intervening between its production and consumption must, necessarily, from its very nature be of extremely short duration. Unless it meets these standards of quality, or others equally necessary, in many cases it would be unfit for human consumption. The same injurious result would follow if its delivery from the producer through the distributor to the consumer was not made promptly and at regular intervals. These standards of quality and marketing requirements which are applicable, or which apply to the marketing of fluid milk, are neither required nor from its nature should be required of manufacturing milk. The division of the milk industry into the two classifications, one governing the marketing of fluid milk and the other applying to manufacturing milk, is therefore founded upon a natural distinction existing between the two branches of the same industry.⁵

¹ This chapter was prepared by Don S. Anderson.

² Sec. 738.3 (5) (e), Agricultural Code.

³ John S. Watson, *The Status of Milk Marketing and Stabilization in California*. Bulletin, Department of Agriculture, California, vol. XXVIII, No. 1, January 1939, p. 43.

⁴ *Jersey Maid Milk Products Co., Inc. v. A. A. Brock*.

⁵ *Idem*.

This distinction is the basis of milk regulation in California, for manufacturing milk prices are taken as a base, and to this base is added the necessary additional cost of producing "fluid milk" to arrive at minimum prices for fluid milk. To these minimum prices are added the necessary costs of distribution to arrive at minimum wholesale and retail prices.

THE BACKGROUND OF PUBLIC REGULATION

Several factors have apparently been responsible for the development of public regulation of fluid milk marketing in California. Among those which have been mentioned are the efforts of cooperative marketing associations to secure higher prices for producers of fluid milk, the entrance of chain stores into milk distribution, and the sharp decline in the price of manufacturing milk during the years 1929-32.

The cooperative marketing association has been called the progenitor of public regulation of milk marketing in California:

To understand this type of regulation (by public authority) we must analyze its progenitor, the cooperative marketing association, for producers early turned to cooperative marketing associations to meet the evils of milk marketing discussed above. These organizations sought to merge the bargaining power of single producers and to sell their milk as a unit, thereby overcoming the inequality between the small producer and the huge distributor. But these associations could never secure 100 percent of the supply of milk, and it was the unregulated 10 percent that, as is so often the case, compelled further control.⁶

A dairyman of Petaluma, Calif., has described the situation as follows:

The problem of stabilization is not a question that has arisen in the last few years. Many of us can recall that our first efforts toward stabilizing the dairy industry began about 1915 or 1917. In those days we did not call it "stabilization," but we really were striving to establish some program of stabilization. The California cooperative law came into existence about that time. Numerous cooperative milk associations were organized throughout the State of California. I will say this for these associations—I am only bringing this up as a matter of history to point out the weakness and the lessons we have learned. These associations, like most others of similar type and character, obligated producers to market through central agencies, and we turned our product over to the control of certain boards of directors, or certain men, to sell for us. We found the collective bargaining that the California law gave us, which was supported by national legislation, would aid in stabilization. In those days we progressed a long way toward stabilization of producer prices, and when you stabilize the producer price you stabilize half of the price of market milk.

As time progressed those distributors who wished to buy milk for less than their competitors, in order to undersell, found that they could beat the cooperative marketing association. They have demonstrated that by buying from unorganized producers they could throw back a portion of the normal supply of milk upon the particular cooperative involved, and if they increased the amount, those producers who were members of cooperatives would have to bear the load, while producers who received money direct got more money. The result was that such methods brought in more producers, increasing the load of milk on these particular cooperatives. Now, the surplus of milk created in this manner necessarily had to be salvaged at prices lower than the regular price of market milk, entailing a direct loss to producers. In San Francisco we had an association controlling 95 percent of the milk; they had a 51 percent interest in one of the largest distributing firms in San Francisco, with a well paid up capital stock. This association, with 95 percent control, was able, at that time, to dictate prices, which caused overproduction to the extent of 8,000 to 10,000 gallons of milk in excess of market requirements. This caused a loss to members of approximately 9 cents a gallon on this surplus not sold as market milk.

⁶ Matthew Tobriner, Bulletin, Department of Agriculture, California, vol. XXVI, No. 1, January, February, March, 1937, p. 81.

The way we figure milk these days, 9 cents a gallon is approximately 27 cents a pound butterfat, or equivalent, almost to recent butter prices. If the farmer was able to take 27 cents a pound less for his surplus milk, either he was getting too much for his milk or less than it cost him to produce it. That is the particular story of San Francisco.⁷

This dairyman concluded that "Cooperative marketing programs were carried out over a period of years and that an accumulation of surplus would occur in any market."⁸

Another factor alleged to have led to public regulation of fluid milk marketing in California is the entrance of chain stores into milk distribution. In some of the larger markets the chains owned their creameries and processing and bottling plants, and sold only to their own stores. The regular distributor, because independent retail stores handled several brands of milk and therefore took only relatively small amounts of milk from each distributor, had higher costs than the chain. Furthermore, the chain widened the spread between cash and carry and home delivered prices for milk, and the independents wanted to meet the chain store without cutting their margin per quart of milk. All these difficulties caused the distributor to resist more vigorously the efforts of cooperative marketing associations to increase or maintain the price paid producers for fluid milk. One way to resist was to develop sources of supply from nonmembers of the association.

The development of sources of fluid milk from nonmembers of fluid milk cooperative marketing associations was made easier by the breakdown of prices of dairy products after 1929. During the 1920's in most California markets apparently board of health regulations were such that a differential of 22 to 26 cents per pound butterfat did not induce producers of manufacturing milk to attempt to enter the fluid milk markets. The decline in butter and cheese prices after 1929, however, resulted in many producers of manufacturing milk seeking to improve their incomes by attempting to enter the fluid milk markets.

THE DEVELOPMENT OF STATE REGULATION⁹

An act of the California Legislature, passed in 1916, gives the director of agriculture the power to act as adviser in assisting producers and distributors to improve the efficiency of marketing farm products. This act also provides that the director may act as an arbitrator in cases of controversy between producers and distributors. The assistance of the director must be requested by the producers and distributors.

In January 1932 the producers and distributors of market milk in the San Francisco market requested the director to aid them in the stabilization of resale prices in that market. In August 1932 the producers and distributors of the Los Angeles market petitioned the Governor for assistance in that market. A milk trade board, composed of producer and distributor representatives, was formed in the San Francisco market in early 1932. This board immediately put uniform purchasing and resale price schedules into effect, and these were maintained during the remainder of the year. Similar boards were organized in Los Angeles, Stockton, Santa Clara, Oakland, and other milk markets.

⁷ John Watson, *Fluid Milk Stabilization for the Bay Region*. Bulletin, Department of Agriculture California, vol. XXV, No. 1, January, February, March, 1930, pp. 101-102.

⁸ *Ibid.*, p. 104.

⁹ J. M. Tinley, *Public Regulation of Milk Marketing in California*, Berkeley, Calif., 1933, pp. 32-46.

In late 1933 Federal milk marketing agreements were introduced into several California markets. These agreements were replaced by Federal licenses early in 1934. During 1934 it became questionable whether the Federal Government had authority in the California markets, because all their milk came from within the State. This resulted in agitation for State regulation.

The California Legislature during its 1935 session passed two laws affecting the marketing of fluid milk. The Thorpe Fair Practices Act required the licensing of all distributors and producers of fluid milk and specified 14 practices which were regarded as unfair. The Young Act provided that producers who supply 65 percent or more of the fluid milk in a given area might apply to the director of agriculture for the appointment of a local control board. This local board would have power to establish, with the approval of the director, minimum prices to be paid to producers by distributors. Minimum resale prices were not authorized. Late in 1936 a decision of the superior court in San Francisco raised a question as to the constitutionality of the Young Act on the ground that it provided for an undue delegation of legislative powers to the local control boards.

Because of the doubtful constitutionality of the Young Act, a new bill was introduced into the 1937 session of the California Legislature and passed both houses unanimously in January 1937. This bill was amended twice by the session which passed it; and another act, the Desmond Act, providing for minimum resale prices, was also enacted by the 1937 session.

THE MARKET SITUATION

Of the 4,000,000,000 or more pounds of milk produced annually in California, probably less than 40 percent is sold as fluid milk and cream to city and village people. Approximately 25 percent of this is retailed chiefly by producers, the balance being sold through distributors. Thus, the potential supply of fluid milk and cream is greatly in excess of that required for consumption as whole milk. Furthermore, the producers of manufacturing milk are situated within the regions where fluid milk is produced. These facts have caused those charged with administering the California law to conclude that—

.. The price of butter basically determines the value of milk and all of its products, as a definite relationship exists between the price of butter and milk and milk products.¹⁰

This viewpoint is in sharp contrast to that held in Oregon, where the producers of fluid milk are protected from competition of others by regulations which rigidly limit the entrance of new producers into the market. In California the only restraint upon the entrance of new producers into the fluid milk market is the higher cost of producing milk under the sanitary requirements for fluid milk production. It is apparently thought that shifting from the production of manufacturing milk to the production of fluid milk can be prevented if the difference between the prices of these two kinds of milk is kept about equal to the extra cost of producing fluid milk.

The maintenance of such relations between the price of fluid milk and manufacturing milk, moreover, obviates the necessity for erecting special economic barriers around individual milk markets.¹¹

¹⁰ E. L. Vebrow, Report on Costs of Producing Fluid Milk for the Alameda County Marketing Area (mimeographed), Department of Agriculture, California, p. 3.

¹¹ J. M. Tinley, Economic Considerations in Fluid Milk Stabilization. Bulletin, Department of Agriculture, California, vol. XXVII. No. 1, January, February, March, 1938, p. 114.

Two sections of the California law seem to prohibit the type of restrictions placed upon the sale of fluid milk in Oregon.

Nothing in this chapter shall be construed as permitting or authorizing the development of conditions of monopoly in the production or distribution of fluid milk or fluid cream.¹²

No such plan (stabilization and marketing plan) shall involve a limitation upon the production of fluid milk or fluid cream.¹³

THE OBJECTIVES OF REGULATION

In passing the legislation providing for public regulation of fluid milk marketing in California, the legislature declared—

that unfair, unjust, destructive, and demoralizing trade practices have been carried on and are now being carried on in the production, marketing, sale, processing, and distribution of fluid milk and fluid cream, which constitute a constant menace to the health and welfare of the inhabitants of this State and tend to undermine sanitary regulations and standards of content and purity, however effectually such sanitary regulations may be enforced; that health regulations are insufficient to prevent disturbances in the milk industry which threaten to destroy and seriously impair the future supply of fluid milk, and to safeguard the consuming public from future inadequacy of the supply of this necessary commodity; that it is the policy of this State to promote, foster, and encourage the intelligent production and orderly marketing of commodities necessary to its citizens, including milk, and to eliminate speculation, waste, improper marketing, unfair and destructive trade practices, and improper accounting for milk purchased from producers.¹⁴

It was also declared that it was the intent of the legislature that the terms and conditions established for purchasing fluid milk and cream from producers and of distribution to consumers shall be those which "will insure an adequate and continuous supply of pure, fresh, wholesome fluid milk and fluid cream to consumers thereof at fair and reasonable prices."¹⁵

In an amendment to the legislation passed in 1937 the legislature gave more attention to the economic condition of fluid milk producers. The following was included in the statement of urgency included in these amendments.

The economic conditions of fluid milk producers throughout the State are such as to require immediate relief if their purchasing power and taxpaying ability are to continue and their morale and standard of living are not to be undermined. Such relief can be afforded only by the orderly production and marketing of fluid milk and fluid cream. The provisions herein contained are necessary in order to prevent the further demoralization of the fluid milk and fluid cream industries.¹⁶

The 1937 legislature also amended the law providing for public control of milk regulation by making it mandatory that minimum wholesale and retail prices be established whenever minimum prices to producers were in force.¹⁷ The legislation passed in 1935 provided only for minimum producer prices. At a hearing called in connection with the setting of minimum retail and wholesale prices the author of these 1937 amendments testified substantially as follows: Despite the fact that prices to producers were fixed under the 1935 legislation, distributors throughout the State were having milk wars; competition was keen among them and was becoming ruinous. For this reason the legislature deemed it imperative to pass a statute which would

¹² California Agricultural Code, sec. 735.1.

¹³ *Ibid.*, sec. 736.4.

¹⁴ *Ibid.*, 735 (b).

¹⁵ *Ibid.*, 735.1 (d).

¹⁶ Sec. 2 of ch. 57, Stats., 1937, California.

¹⁷ Article 2a, Agricultural Code.

stabilize the distribution of milk. The producers themselves came to the legislature and said they felt that in order to continue the stabilization and marketing plan for producers it was essential to carry it further and stabilize minimum wholesale and retail prices for the benefit of the distributor in order to prevent milk wars. The purpose of such legislation would be to protect the prices fixed for dairymen as producers. When asked whether he felt that the legislation was taking care of the interests of the public and of the consumers by minimum wholesale and retail prices he replied that he did not think that was entirely true. Rather, the legislation providing for minimum wholesale and retail prices, at the instance of producers, was to help maintain their position in the market and to eliminate milk wars. The interest of the legislature was to establish prices charged by distributors sufficiently high to permit the distributor to operate his business at a profit and to protect the producer in the price established for him.

THE CONTROL AGENCY

The director of agriculture of the State of California is charged with the administration and enforcement of the legislation providing for public regulation of the sale of fluid milk in California. The work of administration and enforcement is carried on by the appropriate units of the department of agriculture. A fluid market milk assistant in the division of markets of the department of agriculture is responsible for making the cost studies upon which the director relies in determining what minimum prices shall be established.

When the Young and Desmond laws were first passed the director of agriculture depended, to a considerable extent, upon work that had been done by the Giannini Foundation of Agricultural Economics, University of California College of Agriculture.¹⁸ In setting minimum prices to producers under the Young act, use was made of work previously done by the foundation. When the director was required, by the Desmond act, to establish minimum resale prices he arranged with the college of agriculture to have the college conduct the audits and surveys provided for by the Desmond act. Large use was made of mail questionnaires in the survey made by the college, with some accountants being sent into the field to gather additional information.

During 1939 the fluid market milk assistant supervised studies of the cost of producing fluid milk and of the cost of distributing fluid milk in a number of marketing areas. In these studies no use was made of questionnaires; rather, the books and records of the distributors were analyzed by auditors of the department of agriculture.

CONTROL DEVICES

The method of effectuating regulation of fluid milk marketing in California is the "stabilization and marketing plan." Every stabilization and marketing plan must contain:¹⁹

1. Provisions for prohibiting distributors from engaging in the unfair practices hereinafter set forth. (See Appendix A.)
2. Provisions whereby the director designates and prescribes or provides methods for designating or prescribing minimum prices to be paid by the distributors to producers for fluid milk in one or more of the various classes.

¹⁸ J. M. Tinley, *Public Regulation of Milk Marketing in California*, Berkeley, Calif., 1938, pp. 71 and 83.

¹⁹ Agricultural code, California, sec. 736.3.

Stabilization and marketing plans may contain the following:

1. Provision that the distributor make certain reports to each producer.
2. Provisions whereby the director designates and prescribes or provides methods for designating or prescribing prices to be paid by distributors to producers for fluid cream.
3. Provisions for prescribing methods to provide uniform prices to be paid to all producers supplying fluid milk to distributors for pasteurization purposes in the market area by pooling the returns of all such fluid milk. This provision may be included only if 65 percent of the producers desire it.

Whenever a stabilization and marketing plan is in effect it is required that minimum wholesale and retail prices be established or that methods for designating and prescribing such prices be provided.

The first step in the regulation of fluid milk marketing is the establishment of "marketing areas."²⁰ A marketing area is an area in which milk is sold to consumers; it has nothing to do with production. The stabilization and marketing plans provide that each distributor who receives or otherwise handles fluid milk, which fluid milk is distributed within the marketing area covered by the plan, shall pay not less than the prescribed prices per pound of milk fat to producers. Orders covering minimum retail and wholesale prices prescribe what these minimum prices shall be for each marketing area. After a marketing area has been established, before a stabilization and marketing plan can become effective the director must determine that not less than 65 percent of the total number of producers supplying fluid milk used in the area and producers of not less than 65 percent of the total volume of fluid milk desire that the plan become effective.

After the marketing area has been established, studies are made under the supervision of the fluid market milk assistant to determine the costs of producing and of distributing fluid milk of producers and distributors who are supplying the area. These studies and additional hearings are used as a basis for determining what minimum prices shall be established for the marketing area. In the main, the stabilization and marketing plans made effective in California have included only the unfair trade practices specified in the laws and the minimum prices that distributors are required to pay to producers. Many of the plans provided minimum prices only for fluid milk, although the plan for the Sacramento marketing area contains methods for prescribing minimum prices for four classes of milk. If a stabilization and marketing plan is in effect it is also required that minimum resale prices be established.

STANDARDS

Establishment of Market Areas.

Uniformity is the standard for the establishment of marketing areas. By law the director is ordered to designate marketing areas "wherein he finds the conditions affecting the production, distribution and sale of fluid milk, fluid cream, or both, reasonably uniform."²¹ The State supreme court has held that "uniformity of conditions

²⁰ *Ibid.*, sec. 736.

²¹ Sec. 736, agricultural code.

under which milk and cream are produced and sold would seem to be a sufficient standard to guide the director in designating market areas for the sale of these products."²²

Establishment of Minimum Prices Paid Producers.

The principal standard used in establishing minimum prices paid producers is indicated by the following provision of the legislation:

provided that the prices so prescribed shall be based upon the economic relationship of the price of fluid milk for the market area involved to the price of manufacturing milk, taking into consideration the additional costs incurred in producing and marketing fluid milk over and above such costs incurred in producing and marketing manufacturing milk.²³

In upholding this standard as sufficient the court characterized it as similar in principle to the so-called "flexible tariff provision of the Tariff Act of 1922 by which the President was authorized to change the tariff rate to equalize differences in cost of production between articles manufactured in this country and those manufactured abroad."²⁴

This standard is depended upon to maintain a balance between the production of fluid milk and the production of manufacturing milk. It is used in lieu of the system of quotas and restrictions upon entrance into the fluid milk market which are so important a part of the Oregon plan of fluid milk marketing regulations.

In the application of this standard the department of agriculture makes studies of the costs of producing fluid milk of producers who are supplying such milk to the market under consideration. It also studies the costs of producing manufacturing milk in the areas in which the producers of fluid milk supplying the marketing area are located. The costs of producing fluid milk have been found to be higher due to more stringent health regulations, the need for more uniform production throughout the year, and other factors. These additional costs arrived at by determining the difference between the cost of producing fluid milk and the cost of producing manufacturing milk are used in determining the minimum prices to be paid producers.

In recent orders the only varying factor in this differential which has been considered is the cost of feed. The average daily price of 92-score butter at San Francisco or at Los Angeles has been taken as a base from which to calculate the minimum prices to be paid producers for fluid milk. The amount by which the minimum price paid producers for fluid milk exceeds this average daily price of 92-score butter depends upon the average daily price of a specified basic dairy ration. Thus the minimum price paid producers for fluid milk is not a fixed price but rather a price that varies with the price of 92-score butter and with the price of dairy feeds.

In applying the standard of "additional costs incurred in producing and marketing fluid milk over and above such costs incurred in producing and marketing manufacturing milk," the California Department of Agriculture in its cost studies²⁵ divides these costs into two general categories: (1) Costs which do not vary with the seasons, and (2) costs which do vary with the seasons. The first category includes such items as rent, depreciation, taxes, interest, transportation, labor, and herd replacement costs. Feed cost, which represents approxi-

²² *Jersey Maid Milk Products Co. v. A. A. Brock.*

²³ Sec. 735.4 (b) (4), agricultural code, California.

²⁴ *Jersey Maid Milk Products Co. v. A. A. Brock.*

²⁵ E. L. Vehlrow, Report of the Division of Markets Pertaining to the Costs of producing Fluid Milk for the Imperial County Marketing Area (unlmeographed).

mately one-half of the total cost of producing milk, is the principal item in the second category.²⁶

On the basis of its cost studies the department arrives at the "added costs" of producing market milk as compared with producing manufacturing milk. These added costs are then used in the "producer price formula" which begins with the price of 92-score butter in one of the California markets as a base. Since all costs except feed costs are considered to be constant, the only variables used in arriving at the minimum price to be paid producers for market milk are the price of butter and the price of feed. The method of using these two variables in arriving at minimum prices paid to producers for market milk is indicated in appendix B.

The fact that only the price of butter and the price of feed are considered as variables does not mean that other additional costs of producing market milk are ignored. These other costs are held constant in the "producer price formula." In the example given in appendix B, which is the formula for the Imperial County marketing area, these other additional costs are estimated at 8.3 cents per pound of milk fat.

When the price of 92-score butter is 34 cents per pound it is estimated that the over-run value of the butter will be 3.5 cents and the value of the skim milk 3 cents. These values added to 34 cents gives 40.5 cents as the price per pound of butterfat in manufacturing milk. With the price of the basic dairy ration between 24 cents and 30 cents the added feed costs are estimated as 8.7 cents per pound of fat. These added feed costs and the other additional costs mentioned in the previous paragraph, when added to the price per pound of butterfat in manufacturing milk, gives the minimum price for fat in market milk for this butter price and this feed price ($40.5 + 8.7 + 8.3 = 57.5$). The minimum price established was 58 cents (line 3 in sec. (a) of appendix B).

How well the differential between prices of manufactured milk and of market milk established by this method reflects the actual costs to which the farm responds depends upon the effectiveness of the cost accounting methods used, the data available, and the extent of the variation in these costs between farms. All farm management work suggests that the farm to farm variation will be great.

One check on how close the established differential is to the actual difference in costs which influence the farmers might be the extent to which the production of market milk increases or decreases after the minimum prices are established.

The effectiveness of this check is limited by the fact that most producers in the market at the time the price becomes effective will have connections with some distributor. Other producers wishing to enter the market will have difficulty in finding distributors to take their milk. Under the minimum price schedule they cannot tempt distributors by offering to supply milk at lower prices, and there are few other inducements which they can offer. Thus even though other farmers may wish to take advantage of the established prices they may find it impossible to do so. The situation would be different if market-wide pools were established with free entry of new producers, but under the California law this requires the approval of at least 65 percent of the producers, by number and by volume, supply-

²⁶ Feed costs probably vary more from year to year than from season to season within the year.

ing the market. There is little reason for producers with established distributor connections to approve a program that would facilitate the entrance of new producers into the market, and distributors probably have little incentive for encouraging new producers to enter the market since they would have to pay new producers the established minimum prices.

Several stabilization and marketing plans providing that minimum prices to producers of market milk would fluctuate with changes in butter prices and feed prices, became effective in March and April, 1939. In the fall of 1939 it was impossible to determine how successful this price would be in maintaining the total production of market milk about equal to the quantity consumed. Indications were that in relation to consumption the quantity produced would be abundant.

Other standards for setting minimum prices to producers are—

that the director finds that such prices will tend to effectuate the purposes and policy of this chapter and will insure consumers a sufficient quantity of pure and wholesome milk.²⁷

and that they will—

insure an adequate and continuous supply of pure fresh wholesome fluid milk and cream to consumers thereof at fair and reasonable prices.²⁸

Establishment of Minimum Retail and Wholesale Prices.

In establishing minimum wholesale and minimum retail prices the director is required to find with respect to such prices: ²⁹

(1) That such prices are not more than reasonably sufficient to cover all necessary costs, according to the method or type of distribution, including a reasonable return upon necessary capital invested, of reasonably efficient distributors and retail stores engaged in the distribution of fluid milk, fluid cream, or both, in such marketing area as such necessary costs of reasonably efficient distributors and retail stores are shown to the director by the facts available to the director from investigations, surveys, audits, and hearings required in this section.

(2) That such prices will tend to maintain in the business of distributing fluid milk and fluid cream, or both, such number of reasonably efficient retail stores and distributors of fluid milk and fluid cream, or both, in such marketing area as the director finds necessary to insure to consumers in such marketing area sufficient distribution facilities of the several types or methods commonly used by consumers.

(3) That such prices will protect the interests of consumers of fluid milk, fluid cream, or both, in such marketing area by insuring to them adequate and efficient distribution facilities of the several types or methods commonly used by them without requiring such consumers to pay more for their supplies of such fluid milk, fluid cream, or both, than is necessary to maintain such adequate and efficient distribution facilities in such marketing area.

These standards emphasize "necessary costs" of reasonably efficient distributors and also different types and methods of distribution. The latter is in contrast to Oregon regulation which eliminated the differential between prices of milk sold over the counter for cash and prices of milk delivered at homes.

In applying the standard of "reasonably efficient distributors" the California Department of Agriculture has attempted to apply what has been called the "supply-line" theory.³⁰ This theory assumes that in each marketing area there are a number of distributors with varying costs of distribution. It also assumes that the total capacity of all

²⁷Sec. 736.3 (b), agricultural code, California.

²⁸Sec. 735.1, agricultural code, California.

²⁹Sec. 736.12, agricultural code, California.

³⁰J. M. Tinley, *Public Regulation of Milk Marketing in California*, Berkeley, 1938, p. 124.

the distributors in the market is in excess of the total sales in the market—that some or all of the distributors are using only a part of the capacity of their plants. These assumptions appear to be in accord with the situation in most California markets.

If the costs of all the distributors were known it would be possible to rank them in ascending order of costs. Then, if the total sales of the market were known and also the capacity of each distributor's plant, it could be determined how many of the distributors, beginning with the distributor whose costs were lowest, would be necessary to supply the market if every distributor operated his plant at capacity. If the distributor with lowest costs had sufficient capacity to supply the whole market, his plant would be the "supply-line" plant and he would be considered the "reasonably efficient" distributor. If the plants of several of the low-cost distributors were required to supply the market, then the last plant required would be the "supply-line" plant and presumably would be considered the "reasonably efficient" distributor. Thus the distributor with lowest cost need not necessarily be the one who determines reasonable efficiency.

This method of determining "reasonable efficiency" is based upon a section of the California law which directs that along with other "economic factors" the following shall be considered in determining minimum wholesale and minimum retail prices:

The amount of the available capacity for processing and distributing fluid milk, or fluid cream, or both, of all distributors in such marketing area and the estimated extent to which such available capacity is being used by such distributors.³¹

In practice it has been impossible to make all the determinations required by the "supply-line" theory. Lack of personnel makes it impossible to make cost studies of all the distributors in a marketing area. Many distributors, especially producer-distributors, would not have the records necessary for a study of their costs. In one marketing area 49 distributors were licensed to market fluid milk. Of these, 32 were producer-distributors. In this marketing area it was possible to make cost studies of the operations of four distributors. These four handled 50 percent of the total fluid milk marketed in the area and 80 percent of the pasteurized milk. In this market the proposed prices were based on the operations of the plant with the lowest operating cost of any of the plants studied, after the elimination of expenses considered unnecessary by the department.³²

Not only is the director of the department of agriculture to consider the costs of reasonably efficient producers but he is also to consider the "necessary costs." The department has interpreted this to mean that only necessary costs are to be considered and have eliminated what they consider to be unnecessary costs. Costs which have been eliminated include excessive depreciation, corporate expense, memberships and dues, donations, entertainment and sales promotion, solicitors, and excessive route expense. No standards as to what are necessary costs are set up in this legislation. The trade has objected to the elimination of certain costs, especially cost of solicitors. The trade argues that the fact that such costs are generally incurred by distributors is sufficient indication that they are necessary. The department is attempting to develop efficiency standards by studying

³¹ Sec. 736.12 (6), Agricultural Code, California.

³² E. L. Vehlow, Report of Division of Markets Pertaining to the Cost of Distributing Fluid Milk for the San Joaquin County Marketing Area (mimeographed), p. 11.

the various operations necessary in the processing and delivering of fluid milk, and has given particular attention to the effect of the number of units carried by wholesale and retail routes on the cost per unit. The effects of the demands, especially of retail stores, for special services have also been studied and the costs of some of these services have been classed as unnecessary.

Prices for fluid milk in effect in San Francisco and in Los Angeles are shown in charts III and IV and in tables I to VI in appendix to chapter III: In San Francisco, it is clear that prices paid producers in recent years have been substantially higher than in 1933 and 1934, notwithstanding some decline in 1939, and that until mid-1939 retail prices were also higher. The gross margin between the two sets of prices has been at about the same levels as in 1932 and 1933, except for brief periods in 1934 and 1936. In the Los Angeles market there has been much greater variation in prices, both at the wholesale and retail levels, with producer prices in 1936-1939 generally above those prevailing in 1933 with the exception of a period in 1938.

SUMMARY

Milk regulation in California has been confined largely to setting minimum prices of fluid milk on the basis of certain costs. Minimum prices to producers are determined by the price of manufacturing milk and the additional costs of producing market milk. Minimum prices to consumers are determined by the cost of milk and the necessary costs of reasonably efficient producers.

Thus far no use has been made of quotas as in Oregon or of base-surplus plans; in fact, no provision for quotas or rating plans is included in the law. A section of the law which provided that no plan "shall involve a limitation upon the production of fluid milk or fluid cream" may prohibit their use. The California plan is to fix the differential between manufacturing milk prices and fluid milk prices at such a level as will induce the production of only as much milk under the sanitary requirements for market milk as can be sold as market milk. Thus far it appears that the supplies of market milk have been ample. Since distributors are required to pay the minimum price there is no inducement for them to seek new producers even though there might be producers willing to sell market milk for less than the fixed price. As long as the stabilization and marketing plans do not provide for market-wide pools the provision for minimum prices may be an appreciable check on the expansion of the production of market milk.

While the principal objective of minimum wholesale and retail prices was to protect the minimum prices to producers, it is the hope of those administering the act that the efficiency of distribution can be increased at the same time. Without regulation, distributors have tended to seek new business by offering additional services rather than by price reduction. Under the minimum price schedule distributors will be prevented from reducing prices. If "unnecessary" costs are not considered in the determination of minimum costs, the services which cause these costs may be eliminated by distributors; but so long as they are permitted to compete only on a service basis it seems unlikely that many services will be eliminated. More positive action

CHART III

Fluid Milk Prices in San Francisco, Calif., 1920-39

CENTS PER
QUART

18

16

14

12

10

8

6

4

2

0

RETAIL PRICE - House Deliveries

GROSS MARGIN

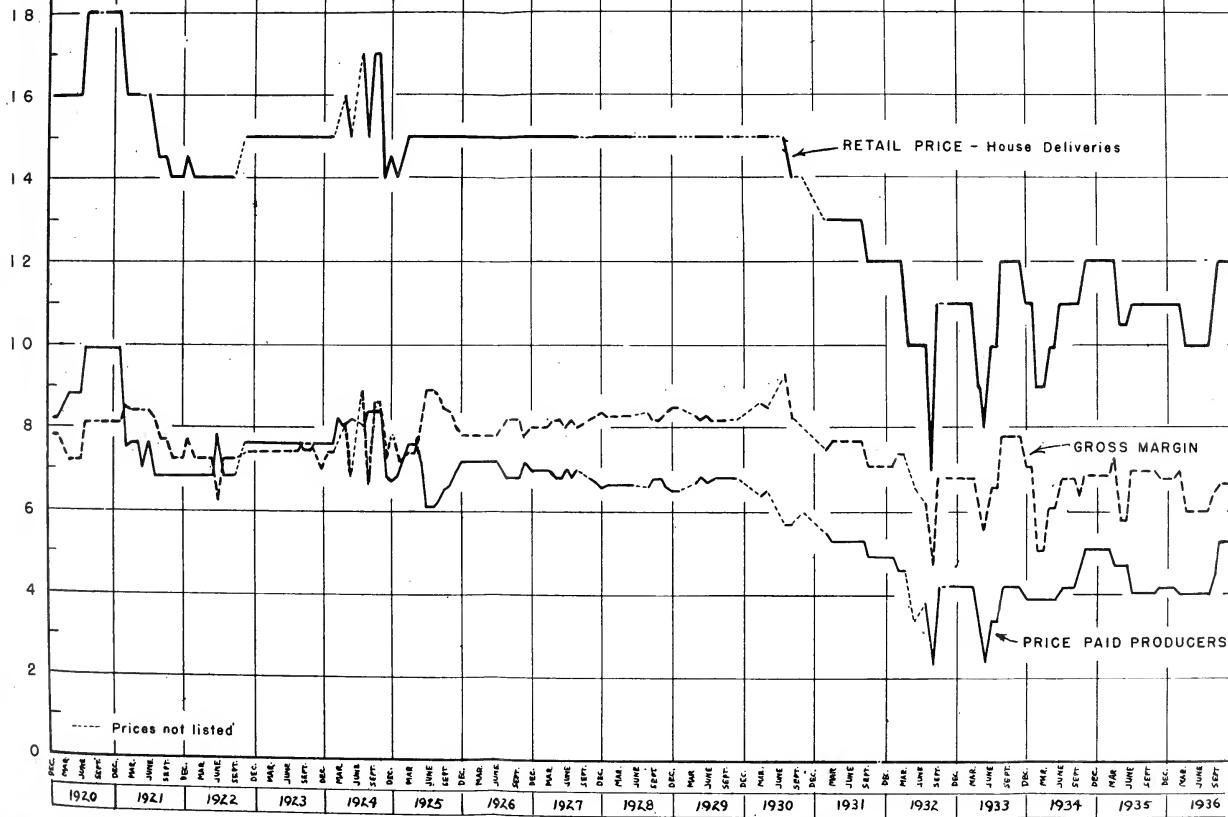
PRICE PAID PRODUCERS

--- Price not listed

1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
May	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.

CHART IV

Fluid Milk Prices in Los Angeles, Calif., 1920-39

CENTS PER
QUART

than merely setting minimum prices will be required of the regulating agency to assure more efficient distribution, less duplication of routes, and less multiplication of services.

There are marked differences between regulation in Oregon and in California. In Oregon, regulation includes definite plans for adjusting the amount of fluid milk available on the market to the amount that can be sold at the prices established. In California the plan is to fix the prices that will attract only as much milk as can be sold. While studies of the cost of distribution are made in both States, California places more emphasis on cost studies and especially upon studies of efficiency of distribution.

APPENDIX A

PROVISIONS FOR PROHIBITING DISTRIBUTORS FROM ENGAGING IN UNFAIR PRACTICES

Provisions for prohibiting distributors from engaging in the following unfair practices must be included in every stabilization and marketing plan:

(1) The payment, allowance or acceptance of secret rebates, secret refunds, or unearned discounts by any person whether in the form of money or otherwise.

(2) The giving of any milk, cream, dairy products, services or articles of any kind, except to bona fide charities, for the purpose of securing the fluid milk or fluid cream business of any customer.

(3) The extension to certain customers of special prices or services not made available to all customers who purchase fluid milk or fluid cream of like quantity under like terms and conditions.

(4) The false or misleading advertising of fluid milk or fluid cream as defined in section 654a of the penal code.

(5) The purchase of any fluid milk in excess of one hundred gallons monthly from any producer or association of producers unless a written contract has been entered into with such producer or association of producers stating the amount of fluid milk to be purchased for any period; the quantity of such milk to be paid for as Class 1, and Class 2, and the price to be paid for each of the several classes, but in any marketing plan where an equalization pool is in operation such contract need not specify the quantity of the several classes. The contract shall also state the date and method of payment, the charges for transportation if hauled by the distributor, and may contain such other provisions as are not in conflict with this chapter. A signed copy of such contract shall be filed by the distributor with the director within five days from the date of its execution.¹

¹ Sec. 736.3, agricultural code, California.

APPENDIX B

BASIS FOR PRICE DETERMINATION

Column 1	Column 2	Column 3
When the average price of the basic dairy ration for the month is—	When the average price of 92-score butter per pound at Los Angeles for the month is—	Then the price of class 1 fluid milk per pound milk fat beginning the first day of the second month thereafter shall be—
(a) 24 cents and less than 30 cents.....	19 cents and less than 25 cents..... 25 cents and less than 31 cents..... 31 cents and less than 37 cents..... 37 cents and less than 43 cents..... 43 cents and less than 49 cents..... 49 cents and less than 55 cents.....	46 cents. 52 cents. 58 cents. 64 cents. 70 cents. 76 cents.
(b) 30 cents and less than 36 cents.....	16 cents and less than 22 cents..... 22 cents and less than 28 cents..... 28 cents and less than 34 cents..... 34 cents and less than 40 cents..... 40 cents and less than 46 cents..... 46 cents and less than 52 cents.....	46 cents. 52 cents. 58 cents. 64 cents. 70 cents. 76 cents.
(c) 36 cents and less than 42 cents.....	19 cents and less than 25 cents..... 25 cents and less than 31 cents..... 31 cents and less than 37 cents..... 37 cents and less than 43 cents..... 43 cents and less than 49 cents..... 49 cents and less than 55 cents.....	52 cents. 58 cents. 64 cents. 70 cents. 76 cents. 82 cents.
(d) 42 cents and less than 48 cents.....	16 cents and less than 22 cents..... 22 cents and less than 28 cents..... 28 cents and less than 34 cents..... 34 cents and less than 40 cents..... 40 cents and less than 46 cents..... 46 cents and less than 52 cents.....	52 cents. 58 cents. 64 cents. 70 cents. 76 cents. 82 cents.

SEC. 2. Basic Dairy Ration.—The average price for the month of the total quantity of ingredients listed below, or similar ingredients containing an equivalent amount of crude protein and digestible nutrients at comparable prices, as said prices are quoted by the Federal-State Market News Service, delivered at Los Angeles, car lot equivalents, shall determine the cost of the basic dairy ration as applied to subdivisions (a), (b), (c) and (d), of table I of this article.

Ingredients or their equivalents:	Quantity
Alfalfa hay, U. S. No. 1, or equal.....	pounds..... 25
Barley, No. 1 feed.....	do..... 3
Bran, northern standard mill run.....	do..... 2
Beet pulp.....	do..... 2
Cottonseed meal (43% protein).....	pound..... 1

APPENDIX TO CHAPTER III

TABLES GIVING DATA ON MILK PRICES IN SAN FRANCISCO, AND LOS ANGELES, CALIFORNIA

TABLE I.—*Monthly average retail price of fluid milk (house deliveries), San Francisco, Calif., 1920-39*¹

[Cents per quart]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920	16	16	15-16	16	16	16	15-16	17	17	17	17	17
1921	15-16	15-16	15	15	15	14-15	13-14	14	14	13-14	13-14	13-14
1922	13-14	12-13	12-13	12-13	12-13	12-13	12-13	12-13	12-13	12-13	12-13	13
1923	12-13	12-13	12-13	12-13	12-13	12-13	12-13	12-13	12-13	12-13	14	14
1924	14	14	14	14	14	14	14	14	14	14	14	14
1925	14	14	14	14	14	14	14	14	14	14	14	14
1926	14	14	14	14	14	14	14	14	14	14	14	14
1927	14	14	14	14	14	14	14	14	14	14	14	14
1928	14	14	14	14	14	14	14	14	14	14	14	14
1929	14	14	14	14	14	14	14	14	14	14	14	14
1930	14	14	14	14	14	14	14	14	14	14	14	14
1931	13-14	13	13	13	13	13	13	10	10	10	10	10
1932	12	12	12	12	12	12	12	12	12	12	12	12
1933	12	12	11	11	11	11	11	11	11	11	12	12
1934	12	12	12	12	12	12	12	12	12	12	12	12
1935	12	12	12	12	12	12	12	12	12	12	12	13
1936	13	13	13	13	13	13	13	13	13	13	13	13
1937	13	13	13	13	13	13	13	13	13	13	13	13
1938	13	13	13	13	13	13	13	13	13	13	13	12-13
1939	13	12-13	12-13	12	12	12	12	12	12	12	12	12 1/4

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.

TABLE II.—*Monthly average price paid producers for milk (3.5 percent) used in fluid form for city distribution, San Francisco, Calif. 1920-39*¹

[Cents per quart]²

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920	8.8	8.8	8.8	8.8	8.8	8.8	8.8	9.3	9.8	9.8	9.8	9.3
1921	8.8	8.8	7.8	7.8	7.8	7.8	6.8	6.8	6.8	6.8	6.8	6.8
1922	6.8	6.8	6.8	6.8	6.8	6.6	6.8	6.8	6.8	6.8	6.8	6.8
1923	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
1924	6.9	6.8	6.9	6.6	6.9	6.6	6.8	6.8	6.9	7.0	6.9	6.9
1925	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
1926	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
1927	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
1928	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
1929	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
1930	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.6	6.8	6.8	6.8
1931	6.3	5.1	5.1	5.1	5.1	5.1	5.1	4.4	4.4	4.2	4.6	4.8
1932	6.0	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
1933	4.8	4.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.6	4.6
1934	4.2	4.4	4.4	4.0	4.0	4.0	4.0	4.0	4.0	4.7	4.7	4.7
1935	4.7	4.7	4.7	4.4	4.4	4.4	4.4	4.4	4.2	4.7	4.2	4.9
1936	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	5.6	5.6	5.6
1937	5.6	5.6	5.6	5.6	5.5	5.5	5.5	5.5	5.5	5.7	5.7	5.7
1938	5.7	5.7	5.7	5.7	5.3	5.3	5.7	5.7	5.7	5.5	5.5	5.5
1939	5.3	5.3	5.3	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	5.3

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.

² Price per hundredweight divided by 46.5.

TABLE III.—*Gross margin between retail price of fluid milk (house deliveries) and prices paid producers, San Francisco, Calif., 1929-39*¹

[Cents per quart]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920.....	7.2	7.2	6.7	7.2	7.2	7.2	6.7	7.2	7.2	7.2	7.2	7.7
1921.....	6.7	6.7	7.2	7.2	7.2	6.7	6.7	7.2	7.2	6.7	6.7	6.7
1922.....	6.7	7.2	5.7	5.7	5.7	5.9	5.7	5.7	5.7	5.7	5.7	6.2
1923.....	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	7.2
1924.....	7.1	7.2	7.1	7.4	7.1	7.4	7.2	7.2	7.1	7.0	7.1	7.1
1925.....	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
1926.....	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
1927.....	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
1928.....	7.1	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
1929.....	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
1930.....	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.4	7.2	7.2	7.2
1931.....	7.2	7.9	7.9	7.9	7.9	7.9	7.9	5.6	5.8	5.4	5.2	5.2
1932.....	7.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
1933.....	7.2	7.2	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.4	7.4
1934.....	7.8	7.6	7.6	8.0	8.0	8.0	8.0	8.0	8.0	7.3	7.3	7.3
1935.....	7.3	7.3	7.3	7.6	7.6	7.6	7.6	7.6	7.8	7.3	7.8	8.1
1936.....	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	7.4	7.4	7.4
1937.....	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.3	7.3	7.3
1938.....	7.3	7.3	7.3	7.3	7.7	7.7	7.3	7.3	7.3	7.5	7.5	7.0
1939.....	7.7	7.2	7.2	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.2

¹ Computed from tables I and II.TABLE IV.—*Monthly average retail price of fluid milk (house deliveries) Los Angeles, Calif., 1920-39*¹

[Cents per quart]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920.....	16	16	16	16	16	16	18	18	18	18	18	18
1921.....	18	16	16	16	16	16	15	14-15	14-15	14	14	14
1922.....	14-15	14	14	14	14	14	14	14	14	15	15	15
1923.....	15	15	15	15	15	15	15	15	15	15	15	15
1924.....	15	15	15	16	15	15	17	15	17	17	14	14-15
1925.....	14	14-15	15	15	15	15	15	15	15	15	15	15
1926.....	15	15	15	15	15	15	15	15	15	15	15	15
1927.....	15	15	15	15	15	15	15	15	15	15	15	15
1928.....	15	15	15	15	15	15	15	15	15	15	15	15
1929.....	15	15	15	15	15	15	15	15	15	15	15	15
1930.....	15	15	15	15	15	15	15	14	14	14	14	14
1931.....	13	13	13	13	13	13	13	12	12	12	12	12
1932.....	12	12	12	10	10	10	10	7	11	11	11	11
1933.....	11	11	11	9	8	10	10	12	12	12	12	11
1934.....	11	8-10	8-10	10	10	11	11	11	11	12	12	12
1935.....	12	12	12	10-11	10-11	11	11	11	11	11	11	11
1936.....	11	11	10	10	10	10	10	11	12	12	12	12
1937.....	12	12	12	12	12	12	12	12	12	12	12	12
1938.....	12	11-12	11-12	11-12	11-12	11-12	11-12	11-12	10-11	10-12	10-11	10-11
1939.....	12	11	11	9-11	10-11	10-11	11-12	11	11-12	10-12	10-12	10-12

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.

TABLE V.—*Monthly average price paid producers for milk (3.5 percent) used in fluid form for city distribution, Los Angeles, Calif., 1920-39*(Cents per quart ²)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920.....	8.2	8.2	8.5	8.8	8.8	8.8	9.9	9.9	9.9	9.9	9.9	9.9
1921.....	9.9	7.5	7.6	7.6	7.0	7.6	6.8	6.8	6.8	6.8	6.8	6.8
1922.....	6.8	6.8	6.8	6.8	6.8	7.8	6.8	6.8	6.8	---	7.6	7.6
1923.....	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.4	7.4	7.6	7.6
1924.....	7.6	7.6	8.2	8.0	8.2	---	8.0	8.4	8.4	8.4	6.8	6.7
1925.....	6.8	7.2	7.6	7.6	7.2	6.1	6.1	6.2	6.5	6.6	6.9	7.2
1926.....	7.2	7.2	7.2	7.2	7.2	7.2	7.0	6.8	6.8	6.8	7.2	7.0
1927.....	7.0	7.0	7.0	6.8	6.8	7.0	6.8	7.0	---	6.8	6.7	6.6
1928.....	6.7	6.7	6.7	6.7	6.7	---	6.8	6.6	6.8	6.8	6.6	6.5
1929.....	6.5	---	---	6.7	6.8	6.7	6.8	6.8	6.8	6.8	6.8	---
1930.....	---	---	6.4	6.5	---	---	5.7	5.7	---	6.0	---	---
1931.....	---	5.5	5.3	5.3	5.3	5.3	5.2	5.3	4.9	4.9	4.9	4.9
1932.....	4.9	4.6	4.6	---	3.4	---	3.8	2.3	4.2	---	4.2	4.2
1933.....	4.2	4.2	4.2	3.0	2.4	3.4	3.4	4.2	4.2	4.2	4.2	3.9
1934.....	3.9	3.9	3.9	3.9	3.9	4.2	4.2	4.2	4.2	5.1	5.1	5.1
1935.....	5.1	5.1	4.7	4.7	4.7	4.0	4.0	4.0	4.0	4.0	4.2	4.2
1936.....	4.2	4.0	4.0	4.0	4.0	4.0	4.0	4.5	5.3	5.3	5.3	5.2
1937.....	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.5	5.5
1938.....	5.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3	4.4	4.0	3.8	3.8
1939.....	5.1	5.1	4.9	4.9	4.4	4.4	4.9	4.9	4.9	4.9	4.9	4.9

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.² Price per hundredweight divided by 46.5.TABLE VI.—*Gross margin between retail price of fluid milk (house deliveries) and price paid producers, Los Angeles, Calif., 1920-39*¹

(Cents per quart)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920.....	7.8	7.8	7.5	7.2	7.2	7.2	8.1	8.1	---	8.1	8.1	8.1
1921.....	8.1	8.5	8.4	8.4	---	8.4	8.2	7.7	7.7	7.2	7.2	7.2
1922.....	7.7	7.2	7.2	7.2	7.2	6.2	7.2	7.2	7.2	---	7.4	7.4
1923.....	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.6	7.6	7.4	6.9
1924.....	7.4	7.4	---	8.0	6.8	---	9.0	6.6	8.6	8.6	7.2	7.8
1925.....	7.2	7.3	7.4	7.4	7.8	8.9	8.9	8.8	8.5	8.4	8.1	7.8
1926.....	7.8	7.8	7.8	7.8	7.8	7.8	8.0	8.2	8.2	8.2	7.8	8.0
1927.....	8.0	8.0	8.0	8.2	8.2	8.0	8.2	8.0	---	8.2	8.3	8.4
1928.....	8.3	8.3	8.3	8.3	8.3	---	---	8.4	8.2	8.2	8.4	8.5
1929.....	8.5	---	---	8.3	8.2	8.3	8.2	8.2	8.2	---	8.2	---
1930.....	---	---	8.6	8.5	---	---	8.3	8.3	---	8.0	---	---
1931.....	---	7.5	7.7	7.7	7.7	7.7	7.7	7.7	7.1	7.1	7.1	7.1
1932.....	7.1	7.4	7.4	---	6.6	---	6.2	4.7	6.8	---	6.8	6.8
1933.....	6.8	6.8	6.8	6.0	5.6	6.6	6.6	7.8	7.8	7.8	7.8	7.1
1934.....	7.1	5.1	5.1	6.1	6.1	6.8	6.8	6.8	6.4	6.9	6.9	6.9
1935.....	6.9	6.9	7.3	5.8	5.8	7.0	7.0	7.0	7.0	7.0	6.8	6.8
1936.....	6.8	7.0	6.0	6.0	6.0	6.0	6.0	6.5	6.7	6.7	6.7	6.7
1937.....	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.5	6.5
1938.....	6.5	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.1	7.0	6.7	6.7
1939.....	6.9	5.9	6.1	5.1	6.1	6.1	6.6	6.1	6.6	6.1	6.1	6.1

¹ Computed from tables IV and V.

CHAPTER IV ¹

STATE CONTROL OF MILK PRICES IN INDIANA

HISTORICAL DEVELOPMENT

Legislation authorizing State control of the purchase and distribution of fluid milk and cream in Indiana was enacted in 1935. The law was reenacted with some amendments in 1937 and again extended for a 2-year period in 1939.

Prior to enactment of State legislation in Indiana three markets in this State—Indianapolis, Evansville, and Fort Wayne—had been under Federal control. An adverse decision in a lower Federal Court made the future of Federal regulation highly uncertain in these markets, principally on the question of interstate versus intrastate commerce. This condition stimulated an interest in State control, although the latter might have developed in time quite independently of the Federal program.

Several of the provisions and much of the language in the Indiana law, and in the first orders written under that law, were nearly an exact reproduction of certain provisions of the Federal program. This is not surprising since the State intended to develop a program in some of its markets jointly with the Federal Government.

One of the important characteristics of fluid milk marketing in Indiana is that the flow of fluid milk and cream from bordering States into Indiana has been negligible compared with the total distributed in the State. Imports into Indiana would, of course, grow substantially if prices became favorable to such commerce. Considerable amounts of milk and cream are shipped to Chicago and some cream is shipped to other out-of-State markets.

The first fluid milk market in the United States for which Federal and State orders were issued concurrently was the Fort Wayne market in 1935. Joint control of the La Porte, Ind., market was similarly developed in 1936. As already indicated the interstate shipments of milk to these markets have never constituted more than a small percentage of the total. Thus it may be said that Federal orders are used to complement State orders in these markets. Federal control was withdrawn completely from the Indianapolis and Evansville markets early in 1936.²

•Production conditions in Indiana differ somewhat from those in other markets studied in that this State is in the eastern part of the Corn Belt where dairying is ordinarily not the main source of farm income. The production of corn, hogs, and beef cattle is the main farm enterprise here. It should be not inferred from this that prices

¹ This chapter was written by Mr. R. K. Froker. The writer gratefully acknowledges the most helpful information was received from C. W. Humrickhouse, executive secretary of the Indiana Milk Control Board, Guy L. Roberts, member of the board; Leon C. Collier and his associates of the market administrator's office, Indianapolis, and from Dr. T. W. Cowden, Purdue University, La Fayette, Ind.

² The Federal order for the Indianapolis market was reported as nonoperative after September 1934 and that no reports were received from handlers after that date. Cancellation of the order did not take place until February 28, 1936.

for milk have been regarded as satisfactory to farmers in Indiana, but merely that their financial interests are not so completely centered in dairying.

Organized fluid milk producers in Indiana have generally favored State milk control legislation. In fact, the extension of the act in 1939 can very largely be attributed to the efforts of the Indiana Cooperative Milk Producers Federation. The enactment of the first law in 1935 can probably be credited largely to this group and to Lt. Gov. Clifford M. Townsend (now Governor) who had interested himself in this program as a way of aiding dairy farmers.

The milk control legislation received some opposition from a consumers' group in Indianapolis, but this never reached serious proportions. Distributors were generally believed to be in favor of this legislation, yet they took very little active part in promoting it. A few opposed it. Organized labor in the State expressed itself in opposition to State milk control.

DECLARATION OF FINDINGS AND POLICY

The State of Indiana made the following declarations of findings in its milk control law of 1935:³

- (1) That milk is a necessary article of human food.
- (2) That the procurement and maintenance of an adequate and satisfactory supply of milk is vital to public health.
- (3) That the production, transportation, processing, storage, distribution, and sale of milk in Indiana is a business affecting the public health and interest.
- (4) That unfair, unjust, destructive, and demoralizing trade practices have been and now are being carried on and constitute a constant menace to the health and welfare of the people and threaten the economic integrity of the milk industry.

There is no evidence accompanying these declarations of an impending shortage of milk and the legislation itself does little with respect to such things as transportation, processing, storage, and unfair practices. Likewise, the sanitary and health qualities of milk are directly affected in only one or two markets, principally Indianapolis.⁴

It was declared to be the policy of the State "to promote, foster, and encourage the intelligent and orderly marketing of milk through producer-cooperative associations." In the next sentence it was stated that "the normal process of producing and marketing milk has become a cooperative enterprise of vast economic importance to the State and of very vital interest to the consuming public, which ought to be safeguarded and protected in the public interest." Obviously the term "cooperative" as here used carries two different meanings. Otherwise, the State would be declaring as its policy to promote a thing which at the same time it declares to be in full existence.

The economic depression and the disparity in farmers' selling and buying prices were stated as having "seriously impaired the agricultural assets supporting the credit structure of the State." General reference is also made to the Federal legislation which grants the Secretary of Agriculture certain powers relative to the production, sale, and distribution of milk but which have not been fully effective in Indiana.

The immediate conditions giving rise to this legislation are probably more correctly stated in the following declaration: "The malad-

³ Ch. 281, sec. 1. The declarations of findings and policy are abbreviated here and are reproduced in exact form only to the extent that such parts are set off in quotation marks.

⁴ Marked improvement in the quality of milk was reported for the Fort Wayne market, but it was not clear to what extent, if any, the price control program had been a factor.

justment of prices of farm commodities with prices which farmers are compelled to pay, and the inability of Federal legislation to function in this economic emergency, without the cooperation of the State agencies, has created an emergency in the State of Indiana which required immediate correction." It seems apparent that the objective of this legislation is basically to raise and maintain fluid milk prices to farmers and to fix wholesale and retail prices to dealers at levels higher than competitive economic conditions would alone develop or support. That this legislation was also intended to complement Federal legislation is at once apparent.

EXTENT OF STATE CONTROL

State control over the marketing of fluid milk extended to 19 market areas in Indiana in 1939. Each area was designated by a county and large town or city and confined largely to urban territory. The orders, of course, specify precise boundaries.

Approximately a million consumers are affected directly by these 19 orders. Between 35 and 40 percent of these persons are in the Indianapolis market area. This market and the Fort Wayne and South Bend market account for roughly 60 percent of the total population within the 19 control areas in the State.

Seventy percent of the total class I sales (milk used for fluid milk and cream) and 75 percent of the total market receipts under State control are in these same three markets. (See table 9.) These percentages are somewhat higher than the preceding figure on percentage of consumers affected. The difference is to be expected since large markets tend to receive a somewhat higher percentage of their total milk supply through specialized distributors than do small markets and a correspondingly smaller percentage of the milk from producer-distributors.

The receipts and sales of milk as reported for each of the 19 markets for 11 months in 1939 are shown in table 9. On a yearly basis these figures would indicate a total of about 236,000,000 pounds of class I milk for the 19 markets and 170,000,000 pounds of milk diverted into manufacturing channels. Total deliveries of milk would therefore be about 406,000,000 pounds annually. For a comparison of these figures with State totals a general picture is also desirable.

TABLE 9.—Average monthly receipts of 4 percent milk and percentage used for fluid milk and cream and for manufacture, 19 markets, Indiana, January–November 1939

	Average monthly receipts (1,000 pounds)	Percentage used for—			Average monthly receipts (1,000 pounds)	Percentage used for—	
		Fluid milk and cream, percent	Manufacture, percent			Fluid milk and cream, percent	Manufacture, percent
Fort Wayne.....	3,587	56	44	LaPorte.....	1,166	74	26
Columbus.....	345	82	18	Indianapolis.....	18,391	50	50
Hartford City.....	192	57	43	Peru.....	479	61	39
Logansport.....	518	80	20	Greencastle.....	224	64	36
Brazil.....	223	78	22	South Bend.....	3,700	67	33
Greensburg.....	105	86	14	Wabash.....	217	78	22
Elkhart.....	1,261	71	29	Richmond.....	1,154	72	28
Marion.....	702	68	32	Winchester.....	151	76	24
Kokomo.....	859	78	22				
Huntington.....	339	74	26	Total, 19 markets.....	33,818	58	42
Warsaw.....	205	75	25				

¹ Average of 6 months, June–November 1939

Indiana produces about 3,000,000,000 pounds of milk annually. Approximately 56.3 percent of this amount goes into manufactured products and 21.3 percent is used on farms. The remaining 22.4 percent is probably sold mostly as fluid milk and cream of which nearly a third is retailed by producers.⁵

These figures would indicate that 35 percent of the milk sold for fluid consumption is under State control. On the other hand, probably not over 20 percent of the milk going into commercial channels for all purposes is under State control either as fluid milk and cream or as surplus in fluid milk markets.

ADMINISTRATION

Milk Control Board.

The Indiana Milk Control Act provides for the creation of a milk control board to consist of five members and to be placed in the division of agriculture. This board is charged with the administration of the act. The commissioner of agriculture, two representatives of producers, and two representatives of distributors make up the personnel of the board. The producer representatives must be chosen by the Governor from nominees selected by organized producers and the other two from nominees named by organized distributors in the State. Members of the board, except the commissioner, serve on a per diem basis.

Powers.

The milk control law lists and describes broad powers which are vested in the board. The following are among the more important ones:

1. To supervise and regulate the production, processing, furnishing, distribution, and sale of milk intended for fluid consumption.
2. To investigate all matters pertaining to the production, transportation, storage, distribution, and sale of milk.
3. To arbitrate disputes between producers and distributors.
4. To designate or establish marketing or sales areas in the State.
5. To cooperate with health authorities in enforcement of sanitary regulations in these market areas.
6. To appoint local milk committees of producers and distributors, mostly for advisory purposes.
7. To adopt and enforce rules and regulations necessary to carry out the provisions of the act, but more specifically governing the following for each market area:
 - (a) Determination of the proportion of milk of each producer which shall be accepted and paid for pursuant to prices established.
 - (b) Classification of milk sold by producers.
 - (c) Establishment of reasonable trade practices.
 - (d) Pricing of milk at wholesale and retail.
 - (e) Determination of prices to be paid producers.

⁵ Data in this paragraph are taken from Bureau of Agricultural Economics mimeographed reports on Milk Utilization. The Indiana Cooperative Milk Producers Federation claimed in a mimeographed statement in 1939 that (1) fluid milk and cream used in villages and cities in Indiana represented 43 percent of the total milk in the State, and (2) that the total milk handled through fluid milk distributors represents 51 percent of the total milk produced.

8. To equalize prices among producers on a distributor or market area basis.
9. To order payment by milk dealers of check-off for (1) checking the quality, butterfat content, and quantity of milk purchased from producers; (2) providing a market and payment for milk to producers; and (3) increasing the quantity and quality of milk consumed by the public.

Other provisions under this section of the law deal largely with the legal phases of the problem such as the procedure, complaints, notices, appeals, etc.

Employees.

The board employs an executive secretary from outside the board itself, and, in addition, a very limited number of legal, accounting, and office personnel. In addition it appoints market administrators for each market area under its control. This type of market administration follows the general pattern of the Federal milk control program. Each market administrator establishes his office in the area to be served and employs accountants and other personnel as needed.

Democratic Control.

The Indiana Milk Board and its executive secretary place a great deal of emphasis upon the democratic features of their administration. Most of the action of the State board is done only upon the initiative or approval of the local milk committee which is looked upon as an integral part of the administrative set-up. Actually, however, the administrative authority is vested in the State board rather than in the local committees.

Financing.

The expenses of the board, including salaries of employees, per diem and expenses of members of the board, and general office expense are covered by State funds. A sizable annual license fee based upon volume of business per plant is charged each distributor operating in a market under State control. This money goes directly to the State treasury and in turn is available to the milk control board as directed by the act. The schedule of such annual fees is shown in table 10.

The local administration of the respective orders is financed by a check-off divided in equal amounts between producers and distributors. The rate of all deductions from payments to producers in 19 markets in August 1939 is shown in table 3. The market service deduction is made primarily for the purpose of checking the butterfat content and quality of milk delivered by each producer. The act provides "that whenever in any marketing area a producer cooperative is furnishing more than 50 percent of the milk sold or consumed in such marketing area, the check-off authorized by the members of such cooperative and purposes for which the same may be used, the quotas assigned to each member's herd, shall be prima facie evidence of the reasonableness of such amount and the uses made thereof." It will be noted from table 3 that those market areas having the highest administration charge have no separate marketing service deduction.

TABLE 10.—*Annual plant license fees of fluid milk distributors operating in State controlled markets in Indiana, 1939*¹

Plant's daily average volume, pounds milk	License fee	Plant's daily average volume, pounds milk	License fee
1,000 or less.....	\$35	15,000 to 20,000.....	\$200
1,000 to 2,000.....	45	20,000 to 25,000.....	275
2,000 to 3,000.....	55	25,000 to 30,000.....	330
3,000 to 5,000.....	65	30,000 to 40,000.....	440
5,000 to 7,500.....	85	40,000 to 50,000.....	550
7,500 to 10,000.....	110	50,000 to 60,000.....	660
10,000 to 15,000.....	165	60,000 to 75,000.....	825

¹ License for distributing-broker (one who buys bottled milk and peddles it at retail or wholesale), \$5 regardless of volume. License for producer-distributor is \$2 for not more than 3 dairy animals owned, managed, or controlled by him plus \$1 for each multiple of 3 of such additional animals.

The act permits compulsory payments from producers and like amounts from distributors for advertising milk. Deductions were made for this purpose in 8 of the 19 markets. (See table 11.) The expenditure of such funds in each market is placed in the hands of a local advertising committee appointed by the local milk committee subject to the approval of the State board.

While the act permits a check-off from producers' payments and a like charge for distributors for the improvement of the quality of milk, only one market area, Indianapolis, has availed itself of this provision. The expenditure of the funds for quality improvement is directed by a local production committee appointed in the same manner as the advertising committee. It was the general opinion of those interviewed in this study that substantial progress had been made in improving the quality of milk in the Indianapolis market, largely due to the finances provided under the order for that market. Milk orders issued by other States covered in this study and by orders issued by the Federal Government have left the financing of the quality program entirely to the municipalities covered by such orders.

TABLE 11.—*Check-offs from payments to producers in Indiana State controlled milk markets, August 1939*

[Cents per 100 pounds of milk]

Market area		Deduction for—			
County	Principal city	Administration	Marketing service	Advertising	Quality production
Allen.....	Fort Wayne.....	2	3	—	—
Bartholomew.....	Columbus.....	5	—	—	—
Blackford.....	Hartford City.....	2	—	—	—
Cass.....	Logansport.....	3	—	1	—
Clay.....	Brazil.....	5	—	—	—
Decatur.....	Greensburg.....	5	—	—	—
Elkhart.....	Elkhart.....	2	2	1	—
Grant.....	Marion.....	2	—	—	1
Howard.....	Kokomo.....	2	3	1	—
Huntington.....	Huntington.....	1 ½	1 ½	—	—
Kosciusko.....	Warsaw.....	2	—	—	—
Miami.....	Peru.....	1	1	2	—
Putnam.....	Greencastle.....	5	—	—	—
St. Joseph.....	South Bend.....	2	2	1	—
Wabash.....	Wabash.....	1	—	—	—
Wayne.....	Richmond.....	2	1	1	—
Randolph.....	Winchester.....	6	—	—	—
Marion.....	Indianapolis.....	½	3 ½	1	½
La Porte.....	La Porte.....	3	2	—	—

¹ Per pound of butterfat.

Relationship to Labor.

Organized labor in Indiana expressed itself in opposition to State milk control legislation and to its administration.⁶ Labor's chief objection seemed to be that the control program allegedly brought distributors together to the extent that they adopted mutually helpful policies and thus prevented organized labor from being as effective in bargaining as it might otherwise have been. Efforts to obtain a closed-shop-union contract from certain fluid milk distributors in Indianapolis were unsuccessful and failure in these efforts was blamed on State control.

It is difficult to see where any of the provisions of the orders issued by the Board could be construed as "anti-labor." On the other hand, some few provisions might be interpreted as distinctly favorable to labor. In several orders the hours during which milk might be delivered at wholesale and retail were specified and limited to "daylight" hours. Furthermore, store sales of milk in all markets with one exception, were priced the same as milk delivered to homes. This provision is generally looked upon as favorable both to distributors and labor since it tends to keep the delivery service intact and at its maximum. In one order a provision was made for a check-off of one-third cent per bottle of milk sold in any industrial plant where employees had an organized group or association operating a canteen. Such money was ordered paid to the market administrator who, in turn, was required to pay it to the employees' group.⁷

Organized labor probably viewed the personnel of the State milk control board and of local committees with concern because appointments to these bodies were made from producer and distributor groups. This procedure was in accordance with the Milk Control Act. The legislature probably reasoned that the milk price control would deal with prices and issues which pertained for the most part to relationships between producers and distributors.

While the official acts of the Board and its appointees can probably not be considered as detrimental to labor, there nevertheless appears to have been a feeling prevalent among some of the administrative personnel that the interests of organized labor and of farmers were in conflict. This attitude is evidenced in certain issues of the Milk Market Bulletin covering the Indianapolis market.⁸

Legal Problems.

One of the early administrative problems in milk price control in Indiana was the determination of the legal status of the act and of its various provisions. This question was decided in the affirmative by the State Supreme Court on March 26, 1936.⁹ Equalization of market proceeds among producers was specifically attacked in this case. Still other issues involved in litigation dealt with the issuance of licenses, non-compliance, and methods of evading the provisions of the orders issued by the Board.

⁶ The Indiana State Federation of Labor voted on September 25, 1939, to petition the Governor to reorganize the personnel of the State milk control board, and also adopted resolutions seeking eventual repeal of the Milk Control Act. The resolutions were sponsored by the Teamsters' Union. The Dairy Record, Sept. 27, 1939.

⁷ Order for Fort Wayne market, Aug. 16, 1938, art. VIII, entitled "Check-off Industrial Employees Association."

⁸ Publication of the Marion County Milk Administration, 446 Illinois Bldg., Indianapolis, Ind. See issues for October and November 1939.

⁹ *Alberts et al vs. Milk Control Board of Indiana*, 200 N. E. 688.

CONTROL DEVICES

Powers granted the Milk Control Board are outlined earlier in this report. These powers are also indicative of the devices which are likely to be used by the Board to effectuate the purposes of the act. Some of the more important devices are the following:

1. Licensing of milk distributors.
2. Establishment of market areas.
3. Establishment of local committees.
4. Classification of milk and specification of prices to be paid by handlers.
5. Price equalization among producers.
6. Base-surplus plan of paying producers.
7. Bonds.
8. "Emergency orders" specifying wholesale and retail prices.

Licensing of Milk Distributors.

Each distributor whether or not he is a producer-distributor or a distributing-broker is required by the Milk Control Act to obtain a license to operate in Indiana. The act lists the type of information that must accompany each application and the conditions under which the Board may refuse a license or suspend or revoke one. Such conditions include (1) failure to account and make proper payments for milk, (2) violation of any sanitary regulation, and (3) violation of any provision of the Milk Control Act or any rules, regulations or orders of the Board.

It is at once apparent that the licensing of milk distributors is an important and effective device for raising funds and for putting the milk control program into operation. During the first fiscal year the act was in force (July 1, 1935, to June 20, 1936) there were licensed 2,535 producer-distributors, 235 distributing brokers, and 525 distributors. The licensing fees totaled \$39,087.75 for this period.

Establishment of Market Areas.

This device becomes important because it defines and limits the territory to which specific orders of the board shall apply. The market area boundaries are usually extended well beyond the corporate limits of the urban market that is to be regulated. For example, the market area for the Indianapolis market is defined as including all of Marion County. This practice tends to curb or eliminate competition from roadside stands and retail sales at farms since such sales can usually be made only at a considerable discount in price.

Establishment of Local Committees.

In every market under State control, as indicated in the section on administration, the Board appointed a local milk committee to serve largely in an advisory capacity. Subcommittees on advertising and production (quality improvement) were also provided for in some orders. These were appointed by the local milk committee, but always subject to the approval of the Board.

The appointment of local committees of producers and distributors has two important advantages in the administration of a milk control law. First it tends to acquaint the Board with local conditions and local viewpoints, and second, rules and regulations are likely to be more readily acceptable if they first have been sanctioned by such a

committee. The members serve without compensation and are selected from producer and distributor groups. Were these committees to include reasonable representation from the consuming public it is probable that their recommendations would have broader public acceptance.

Classification of Milk and Prices.

The classification of milk under Indiana milk orders has much similarity with that in other State milk control plans. Milk sold or distributed as fluid milk and fluid cream is included in class I in all controlled markets in the State, although sub-classes as IA and IB are sometimes used to indicate separate uses within this class as for relief and schools.

Class II milk is usually defined to include that used for flavored drinks, cottage cheese, ice cream, evaporated and condensed milk, although there is less uniformity than in the case of class I.

Class III milk includes other manufactured products, and principally butter.

Prices are specified for each of these classes of milk on the basis "named by which they shall be determined." Class I price is in all cases specified in exact amounts. The prices for class II and III milk are determined by formulas and are based on the prices of manufactured milk products.

Price Equalization and Base Surplus.

Only two of the markets under State control operated on a market pool basis in 1939. The others operated on a dealer pool under which uniform prices are paid to all producers delivering to any one distributor, but are not necessarily uniform among producers delivering to different distributors. This comes about from the fact that distributors have varying proportions of their total milk supply going into different classifications. These proportions are seldom identical among distributors.

In 1939 seven of the markets used a base-surplus plan in paying producers. Under this provision each producer is given an allotment. For deliveries up to his allotment he receives one price, usually a blended price, and for additional production and deliveries he receives a lower price, usually the equivalent of the class III price. It should be kept in mind that the base-surplus plan as used in these markets does not for any one period raise or lower the amounts distributors must pay for milk. It is rather a device for distributing marketing proceeds among producers so that those with uniform seasonal production receive somewhat more money than if they had uneven production. The base-surplus plan limits total production, only in so far as the lower price for excess milk (deliveries over allotments) tends to discourage production or only to the extent that base allotments are not adjusted from year to year with changes in production on individual farms. In Indiana the base-surplus plan does not appear to have been used so as to effect any substantial limitation of total production. In the Indianapolis market, the largest in the State, the base-surplus plan has probably had little, if any, effect on production.

Bonding.

Among the requirements of a distributor in his application for a license under the Indiana milk control law is the following regulation

which is designed to assure prompt and proper payment for milk to producers:

Either a bond in such form and amount as the board may prescribe, with surety satisfactory to the board, conditioned for the prompt payment of all obligations to producers when due; or a financial statement showing evidence satisfactory to the board to the effect that the applicant is of sufficient financial responsibility to insure prompt payment for 60 days' supply of milk.¹⁰

This study did not determine the degree to which this provision has been carried out nor the extent to which it has been successful in assuring full payments to producers. It is probable that the effectiveness of this provision has not been subjected to a real test such as a price war among distributors or a prolonged period of operation in which distributors' margins were not sufficient to meet the expenses of all the distributors. It is to be remembered in this connection that in all fluid milk markets where the State has fixed the prices to be paid for milk to producers, it has also issued and put into effect an "emergency order" fixing the retail and wholesale prices that distributors must charge.

Emergency Orders.

Orders regulating the prices to be charged by distributors at wholesale and retail are called "emergency orders." Those orders specifying the conditions and manner in which milk shall be purchased from producers are known as "official orders." The two types of orders are issued separately.

The board has the power, after investigation, to declare the existence of an emergency in any market area if it finds "that there is imminent danger that the application and enforcement of the other provisions of this act are endangered * * *." When an emergency is determined, immediate steps are taken to issue an "emergency order" regulating the wholesale and retail prices.

For each market area for which an official order has been issued an emergency order has also been issued to run concurrently. This would seem to indicate the board has deemed it essential to fix wholesale and retail prices in order to apply and enforce the other provisions of the act that are designed to improve prices to producers.¹¹

The health regulations for the Indianapolis market prohibit the distribution of unpasteurized milk within the corporate limits of the city. Only two producer-distributors are equipped to meet this requirement. All other distributors in the market must pay the same prices for milk on a use basis. Under these conditions and with the licensing and bonding provisions of the act, it is difficult to understand the "emergency" condition which would force resale prices so low as to endanger the maintenance of prices to producers.

STANDARDS OF OPERATION

Legislative.

The milk control legislation in Indiana gives only very broad general standards for the guidance of the board in the administration of the act.

In granting the board the power to fix the prices which distributors must pay for milk the law provides that "all prices to be paid pro-

¹⁰ Section 7 (B) (a).

¹¹ The board is reported to be of the opinion that the fixing of wholesale and retail milk prices is not sound for long periods and that emergency orders may be discontinued in several markets. Nevertheless, the board has followed a policy of fixing resale prices as well as producer prices for a period of over 4 years.

ducers fixed and determined by the board shall be just and reasonable." ¹² In determining such prices in any marketing area the law provides in another section ¹³ that the board shall be guided by—

1. The cost of production including compliance with all sanitary requirements in force in such market.
2. The value of milk in terms of its basic products—butter, cheese, and evaporated milk.
3. The supply of milk in such market.
4. The welfare of the general public.

This section goes on to state that "any prices fixed pursuant to this act and approved by the board as herein required shall be deemed to be prima facie reasonable." In the same section of the act another standard is set forth which is more easily followed. It is that "the board shall require that the same (prices for milk) shall be uniform as among the several licensees in any market for each grade, quantity, and class of milk."

The act states the conditions under which an emergency order shall be issued and outlines in some detail the procedure to be followed. Beyond this it gives little guidance to the board in the establishment of wholesale and retail prices. Perhaps the legislative body felt that the procedure which it set forth and which called for investigation and public hearing would serve as sufficient guide. The only standard set forth at this point is one requiring that wholesale and retail prices so established must be "fair and equitable."

General Board Policy.

In the administration of the act, "the board consistently follows the plan of consulting local interested parties in each area and giving them what they ask, provided it is reasonable and fair." ¹⁴ The same report states that "the board has never established rules and regulations in a market except upon a request from a substantial part of the local industry." Such "interested parties" and "the industry" would appear to mean primarily producers' associations and distributors, although other groups may be given opportunity to be heard at public hearings and otherwise to make known their wishes direct to the board. They are not, however, represented on committees.

Production Policies.

On the production side it has apparently been the policy of the board to "stabilize" production as much as possible. In working out this policy the board has operated through its local milk committee. Distributors are not permitted to discontinue the purchase of a producer's milk, except for violation of sanitary requirements, without the consent of the local milk committee. If any producer is dropped for the violation of sanitary requirements and such violation was not determined by proper health authorities then this action is subject to review by the local committee.

Similarly, distributors are not permitted to "purchase milk from new producers without first securing written consent of the local

¹² Sec. 5 (12).

¹³ Sec. 10.

¹⁴ Report of the Activities of the Milk Control Board of Indiana, April 1938, mimeographed.

milk committee, subject to the terms and conditions of these rules and regulations and the approval of the board." ¹⁵

While a distributor may not drop a producer or take on a new one without the approval of the local committee the initiative for any change in the source of supply is left with the individual distributor.

The board's policy with respect to such things as base-surplus and market or distributor pools, appears to have been one of following the wishes of producers and distributors in the respective markets. No uniform arrangement exists throughout the State. Seven of the markets operated on a base-surplus plan in 1939 while the remainder did not. Only two of the markets operated a market pool at that time; the others operated on a distributor pool.

Price Policies.

In establishing minimum wholesale and resale prices for milk the board followed a policy of surveying the operations of distributors in each market as required by the Milk Control Act. An accountant was employed to study the books and records of each company to determine what margins were needed to cover its overhead and operating costs. This information served as a guide or basis of consideration rather than as a definite standard. Apparently no formula or rigid standard was applied at this point in deciding what costs should be used, such as the "most efficient firm," "representative firm," or "marginal firm," nor was any standard of capacity or of general operating efficiency specified.

The standards used in arriving at the dealer's buying price for class I milk (that used for fluid milk and cream) are not clear. It appears that the legislative standards outlined earlier in this section were taken into account at least to some degree. Consideration was also given to the particular requests of producers and distributors in each market. Beyond these broad considerations the judgment of the board appears to have been the determining factor. For example, in July 1939, the price of class I milk varied from \$1.85 per hundredweight of 4 percent milk in one market to \$2.36 in another. Certainly production conditions alone could not account for this range in price. At four markets the price was \$1.94, at five it was \$2. Prices at the other markets were scattered. The simple average for the entire 19 markets was \$2.08 for class I milk or 80 to 85 cents above the evaporated milk agreement price.

The price charged for class II milk—that used for flavored drinks, creamed cottage cheese, ice cream, and evaporated milk averaged about \$1.20 per hundredweight of 4 percent milk in July 1939, although the range was from \$1.11 to \$1.30. The usual price per pound of butterfat was equivalent to the price of 92 score butter at wholesale in Chicago plus 30 percent thereof.

Milk received in these markets and used in the manufacture of butter and cheese was considered class III milk. The usual price charged for this class during July was \$1.02 per hundredweight which,

¹⁵ From Official Order No. 15, Art. II, Vanderburgh County Area, effective March 8, 1938. A similar provision is known to have been in orders for some of the other markets.

in terms of butterfat, was equivalent to the price of 92 score butter at wholesale in Chicago, plus 10 percent thereof.

The formulas for determining the price of class II milk produce roughly the same price as the formula used in the national evaporated milk agreement. The class III price is clearly a competitive price at which distributors are willing to purchase excess milk (that not used for classes I and II purposes) and manufacture it into butter or cheese.

The prices were nearly always quoted f. o. b. distributor's plant. An important exception was noted in the official order for St. Joseph County (South Bend). In this order classes I and IB were priced f. o. b. plant. On the other hand, classes IA, II, and III were priced f. o. b. farm.¹⁶ Unless hauling charges are uniform to all producers receiving a blended price, which is unlikely, this pricing arrangement is cumbersome and does not permit "clean" accounting of market proceeds.

RESULTS OF STATE MILK CONTROL IN INDIANA

During the remainder of this report an effort will be made to appraise the operations of the Indiana milk control law up to the latter part of 1939.

Effect on Producer Prices and Production.

The average blended price to producers for all milk delivered to State control markets was 42 cents per hundredweight over the average condensery price during the 8 months April to November 1939. (See table 12.) This premium varied considerably from market to market. The lowest prices were paid in the Indianapolis market which is not only the largest in the State, but in which only approximately 50 percent of the total supply is used for fluid milk and cream sales. The prices at Fort Wayne averaged 41 cents above condenseries for this period. At South Bend this premium was 52 cents. These 3 markets had about 65 percent of the total supply of milk under State control. Prices to producers in the other 16 regulated markets averaged 54 cents over condensery prices for the 8 months for which these data were compiled. Unfortunately comparable data for earlier periods were not readily obtainable. These data, nevertheless, indicate a considerable premium in fluid milk markets over prices paid at condenseries in Indiana. The smallest premiums were paid in the two markets where the most stress was placed on quality improvement during this period. These two markets were in the same general sections of the State as were most of the other markets under State control. It, therefore, seems unlikely that the differences in prices between markets can be explained on the basis of quality or on cost of production. Moreover, it is not possible to say to what extent these premiums represent a net increase to producers over what would have prevailed without State control.

¹⁶ Class IA is all milk sold to any public institution purchasing in excess of 4,500 gallons per month. Class IB is all milk used or sold as fluid cream. Amendment No. 2, Official Order No. 6, St. Joseph County Market Area, effective May 16, 1939.

TABLE 12.—Average premiums paid producers in fluid milk markets under Indiana State control over average prices paid at condenseries in the State during 8 months, April–November 1939¹

[Cents per hundred pounds of milk]

Month	Indianapolis	Fort Wayne	South Bend	Average other 16 markets ²	Average 19 markets ³
April.....	48	62	74	³ 74	³ 58
May.....	31	46	56	² 58	³ 41
June.....	24	37	45	53	34
July.....	31	40	44	56	39
August.....	34	39	45	54	40
September.....	34	36	39	45	39
October.....	37	37	56	48	42
November.....	42	36	53	47	44
Average, 8 months.....	35	41	52	54	42

¹ Monthly Milk Market Report (mimeographed) issued by Indiana Milk Control Board.

² Average prices weighted by volume of receipts.

³ 1 less market included.

Some of the markets have a close adjustment between market receipts and sales of milk, while others do not. The amount of "surplus milk," i. e., milk used for classes II and III purposes, is shown by markets in table 1 for 11 months in 1939. It will be noted that the two markets with a high proportion of surplus milk are the Indianapolis and Fort Wayne markets. Most of the others have a moderate proportion of surplus which would probably all but disappear during the short production season:

The trend in total receipts of milk is shown in chart V and table 13 for the Indianapolis market. Available data for this market cover a longer period than for any other market under State control. It will be noted that there has been a decided upward trend in total market receipts with a leveling off in 1939. There was an increase from 166,623,000 pounds in 1936, the first year for which complete data were available, to 201,011,000 pounds in 1938. Deliveries in 1939 were slightly lower.

The number of producers selling milk to the Indianapolis market was 6,367 in 1935 and 6,325 in 1936.¹⁷ The number did not change materially during the next year and a half. However, from July 1938 to August 1939 the number of producers dropped from 6,287 to 5,842, a decline of 445. This would indicate a considerably more rapid increase in average production per farm than in total market receipts of milk.

¹⁷ Report of the Activities of the Milk Control Board of Indiana, mimeographed, April 1938, p. 17. Later figures on number of producers are from the Market Administrator's office.

CHART V

Total Milk Receipts and Amount Used as Fluid Milk and Cream, Indianapolis, Ind., August 1935 to October 1939

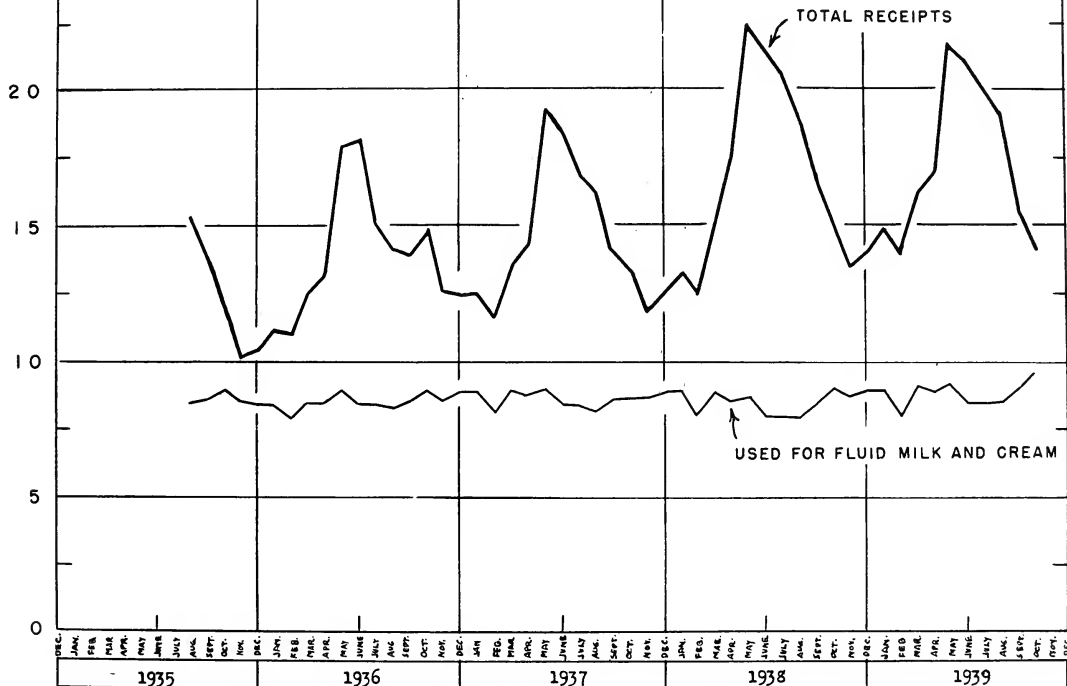
MILLION
POUNDS

TABLE 13.—Total receipts of milk and class I sales, by months, for the Indianapolis market, August 1935–October 1939

TOTAL RECEIPTS (1,000 POUNDS)

Year	January	February	March	April	May	June	July	August	Septem-ber	October	Novem-ber	Decem-ber	Total
1935	11,126	10,992	12,553	13,159	17,759	18,040	13,130	15,244	13,733	12,003	10,230	10,417	161,627
1936	12,611	11,698	13,517	14,326	19,234	18,438	16,962	14,215	13,909	14,725	12,553	12,457	166,623
1937	13,286	12,405	14,704	17,476	22,314	21,536	20,693	19,198	14,190	13,514	11,876	12,461	175,041
1938	14,863	13,955	16,165	16,949	21,570	21,020	20,037	19,111	16,740	15,164	13,427	14,088	201,011
1939									15,578	14,130	13,010	14,015	200,503

CLASS I SALES (1,000 POUNDS)

Year	January	February	March	April	May	June	July	August	Septem-ber	October	Novem-ber	Decem-ber	Total
1935	8,419	7,918	8,582	8,500	8,921	8,422	8,392	8,405	8,623	8,933	8,467	8,406	142,834
1936	8,825	8,133	8,965	8,755	8,987	8,375	8,312	8,331	8,550	8,984	8,553	8,852	102,424
1937	8,847	8,083	8,946	8,590	8,722	8,052	7,962	8,194	8,536	8,600	8,669	8,533	103,204
1938	8,949	8,171	9,144	8,822	9,176	8,580	8,402	8,084	8,458	9,053	8,762	8,921	102,435
1939								8,552	9,059	9,662	9,461	9,559	107,507

1 Total for 5 months.

2 Milk used as fluid milk and cream.

Source: Market Administrator's Report.

It should be remembered at this point that considerable control is exercised over the entrance of new producers into markets under State control. For a time it was apparently the policy of the local milk committee and the milk board to permit new producers to enter the market in the same numbers as those dropping out of the market. This has been particularly important since with the development of higher quality standards in Indianapolis there has naturally been more than the usual turn-over. With the entrance of new producers under these conditions there undoubtedly has been a tendency for producers entering the market to have larger volume than those dropping out. To meet this situation the board further restricted the entrance of new producers to the end that the total receipts of milk remained about the same. This combination of circumstances makes it difficult, if not impossible, to determine the net effect of the price control program upon production.

The amount of milk used monthly for class I purposes in the Indianapolis market is also shown in table 13 and chart V. No material change occurred in these figures until 1939. Sales have recently run consistently higher than in corresponding months of 1936-38. This is probably due in part to improved business conditions making it possible for more people to buy milk or for the same number to increase their daily purchases. Improvement in the quality of milk and industry advertising may also have been factors contributing to this increase in consumption.

Effect on Competition.

A few operators of dairy manufacturing plants have actively opposed the continuation of the Indiana milk control law on the ground that it made for unfair competition. These persons are largely evaporated milk manufacturers who themselves have a national agreement and order under the Federal Government.

The alleged unfair competition rests on two points. The first of these is that surplus milk in the fluid milk markets is purchased on a classified basis and at prices below the normal competitive level. The surplus milk bought at these low prices is mostly made into manufactured products such as butter and evaporated milk. This, it is averred, makes for a lower cost of milk, and, in turn, makes possible price cutting in disposing of the finished product. The other argument is that producers are attracted to the fluid milk markets because of the high average prices paid in these markets as a result of the high price for class I milk. This, in turn, makes it difficult for the straight manufacturing plants to keep their producers satisfied and to prevent them from shifting to fluid milk markets. As a result of these two forces the manufacturers claim that they have unfair competition in the sale of manufactured products and unfair competition in paying producers.

Insofar as these arguments are important and are based on facts they would apply mainly to the Indianapolis and Fort Wayne markets. These two markets have over 70 percent of the surplus milk under State control. In the Indianapolis market the milk used for condensed and evaporated milk purposes is paid for at "butter plus 30 percent" which is substantially the same as the minimum prices prescribed in the national evaporated milk agreement. In the Fort Wayne market the same situation holds true for all surplus milk, except an amount equivalent to 15 percent of the fluid milk and fluid cream sales. This latter

amount is priced at "butter plus 10 percent." Fluid milk distributors usually claim that their manufacturing costs are higher than similar costs in specialized creameries and condenseries.

In view of these conditions it would appear that evaporated milk manufacturers near these markets have not been greatly burdened because competitors have had cheaper sources of supply under the State milk control. Such differences as exist have been due largely to premiums paid by evaporated milk manufacturers above their minimum national agreement price.

To claim that here has been severe competition from high average prices paid producers in fluid milk markets is at the same time to say that State milk control has been instrumental in raising producer prices—an avowed objective of the program.

That there has been more than the usual shifting of milk from manufacturing plants to the fluid milk markets has undoubtedly been true in the case of the Indianapolis and Fort Wayne markets. Part of this has resulted from a more than normal turn-over of producers due to the development of more exacting health standards in these markets. There has also been some shifting in the other direction since those leaving the fluid markets and continuing in dairying have, of course, gone to manufacturing outlets. For these latter producers the State control program has not been beneficial. It seems certain that if there were no artificial restriction barring the entrance of new producers into fluid milk markets under State control any sizable price inducement would cause considerably more shifting of producers toward these markets than away from them. So far the shift does not appear to have been alarming.

Effect on Distribution.

The manner in which the fixing of resale prices has worked in Indiana is indicated, at least in part, by developments in Indianapolis—the largest market in the State and one which accounts for about 45 percent of the fluid milk sales under State control. It is to be remembered in this connection that distribution costs as reflected in distributors' books are used as the original basis of fixing resale prices and distributors' margins.

On April 16, 1939, the price of class I milk to distributors was lowered 28 cents per hundredweight in the Indianapolis market or about three-fifths cent per quart. At the same time minimum wholesale prices were dropped 1½ cents per quart and minimum retail prices were dropped 1 cent per quart. The net effect on distributors' margins was that at wholesale the minimum prices were narrowed nine-tenths cent per quart and at retail two-fifths cent per quart. On this date quotations for prices to be charged distributing-brokers were eliminated from the order, presumably, because these prices could not be enforced effectively. Interdealer sales of this type are always difficult to regulate. The omission of these prices from the order does not appear, however, to have influenced materially other provisions.¹⁸

The reason given for the general reduction in prices was "that an emergency exists in said area due to a very large amount of surplus

¹⁸ Distributing-brokers in this market might more properly be called distributing jobbers or peddlers. They operate only delivery routes and have no plant or plant facilities. They buy their daily requirements of pasteurized and bottled milk from distributors having plant facilities. Title is passed at this point, but milk is usually sold under the brand of the pasteurizing distributor. The distributing-brokers are subject to milk control regulations with respect to resale prices. They do not belong to the bottle exchange.

milk in said market, and due also to the low price of butterfat which has placed the present prices for milk and its products out of proper proportion to butterfat prices."¹⁹ The point with respect to distribution margins is simply that in this market accounting costs alone did not prove an adequate basis for fixing resale prices or that the prices thus established could not be enforced. In other words, general competitive conditions are also a factor to be taken into consideration in naming minimum resale prices.

The reduction in resale prices in Indianapolis would seem to have even more importance when two other conditions are noted. The first is that all milk sold within the corporate limits of Indianapolis must be pasteurized, thus practically eliminating producer-distributor competition in the main part of this marketing area. The second is the influence of the milk bottle exchange in Indianapolis. The exchange is reported to have as one of its requirements for membership the adherence to all laws and regulations pertaining to the distribution of milk in that city. Since the milk order comes within that sphere the bottle exchange has used its power to command compliance with the specified wholesale and retail prices among its membership.

The general trend in retail milk prices and in the prices paid by distributors for fluid milk in the Indianapolis market is shown in appendix to chapter IV, tables I and II, and in chart VI. Buying and selling prices have been brought to approximately the same level as they were prior to the depression. The dealers' buying prices for class I milk have apparently been raised somewhat under State control, but distribution margins do not appear to have changed much from what they were just prior thereto. Too close an interpretation, however, should not be made from chart I, since it is not at all clear that the dealers' buying prices are quoted on a comparable basis throughout the period. The practice of classifying milk and specifying prices on a use basis has applied to the whole market only during the period of public regulation.

Similar prices are shown for the Evansville market in appendix to chapter IV, tables III and IV and in chart VII. Under the State control the distribution margins in this market were increased by 1 to 2 cents or more per quart above the margins prevailing during the previous year or so. Dealers' buying prices showed relatively little rise and, in fact, dropped somewhat during the first few months under State control.

Distribution margins in these two markets were relatively smaller under Federal regulation in 1934 than for any other similar period covered in charts 2 and 3. The causal relationships between price regulation and distribution margins during this period are none too clear. However, one might note that it was in January 1934, that resale price fixing for milk was largely abandoned under the Federal program, although "low" minimum resale prices were specified for some months thereafter. It should also be remembered that the Federal program in Indianapolis was reported ineffective after September 1934.

In July 1939 9 out of 19 markets under control had a retail home delivery price of 10 cents per quart of standard milk. The other 10 markets had a retail price of 11 cents per quart. In only 1 market, Indianapolis, was there a differential in price between the store price

¹⁹ Amendment No. 5 to emergency order No. 5 for Marion County (Indianapolis) marketing area.

CHART VI

Fluid Milk Prices in Indianapolis, Ind., 1920-39

CENTS PER
QUART

18

16

14

12

10

8

6

4

2

0

GROSS MARGIN

RETAIL PRICE - House Deliveries

PRICES PAID PRODUCERS

FEDERAL
CONTROL

STATE CONTROL

..... GROSS MARGIN
 - - - - - NO INFORMATION

1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939

(PREP. D. 1941)

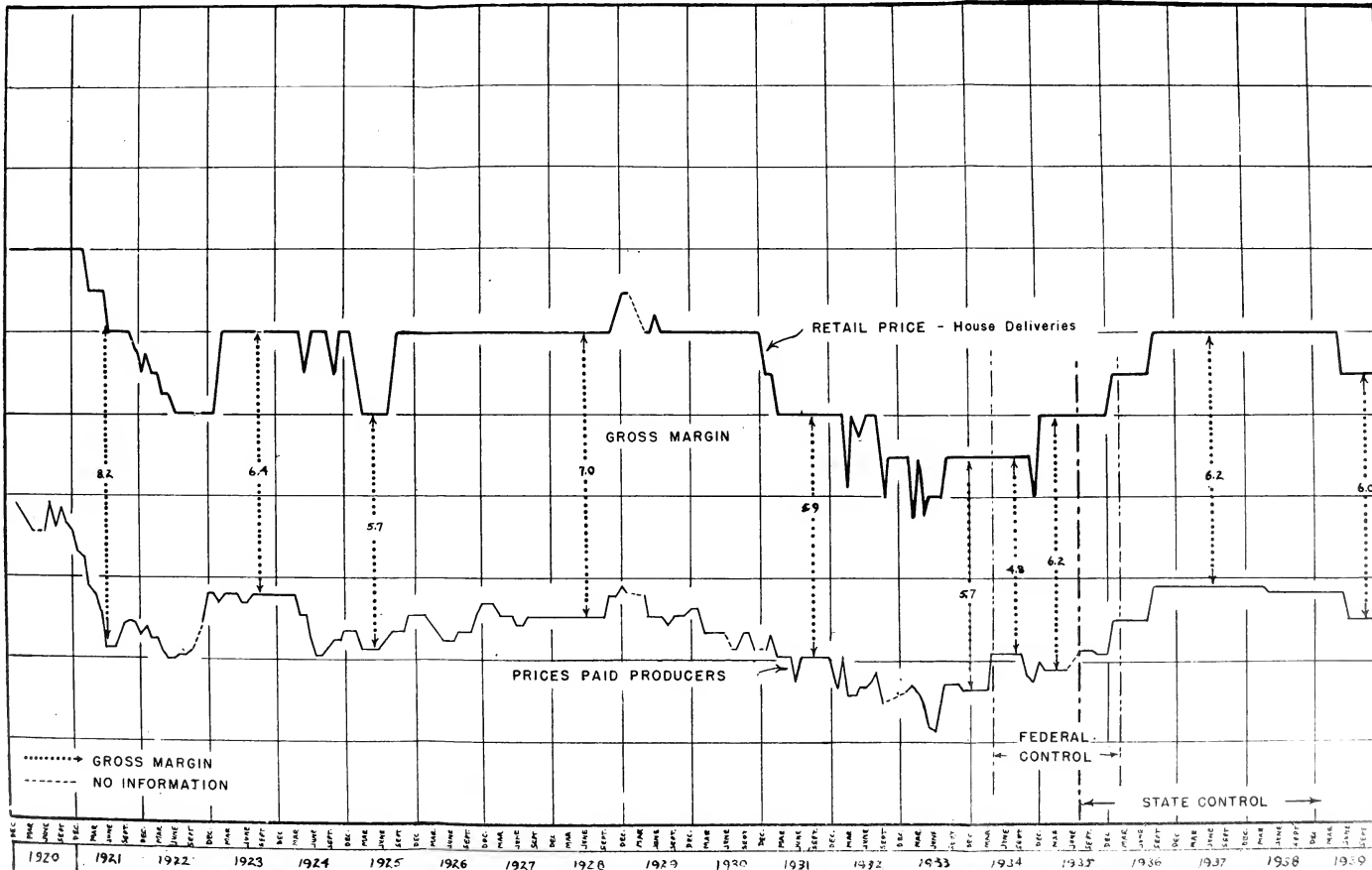
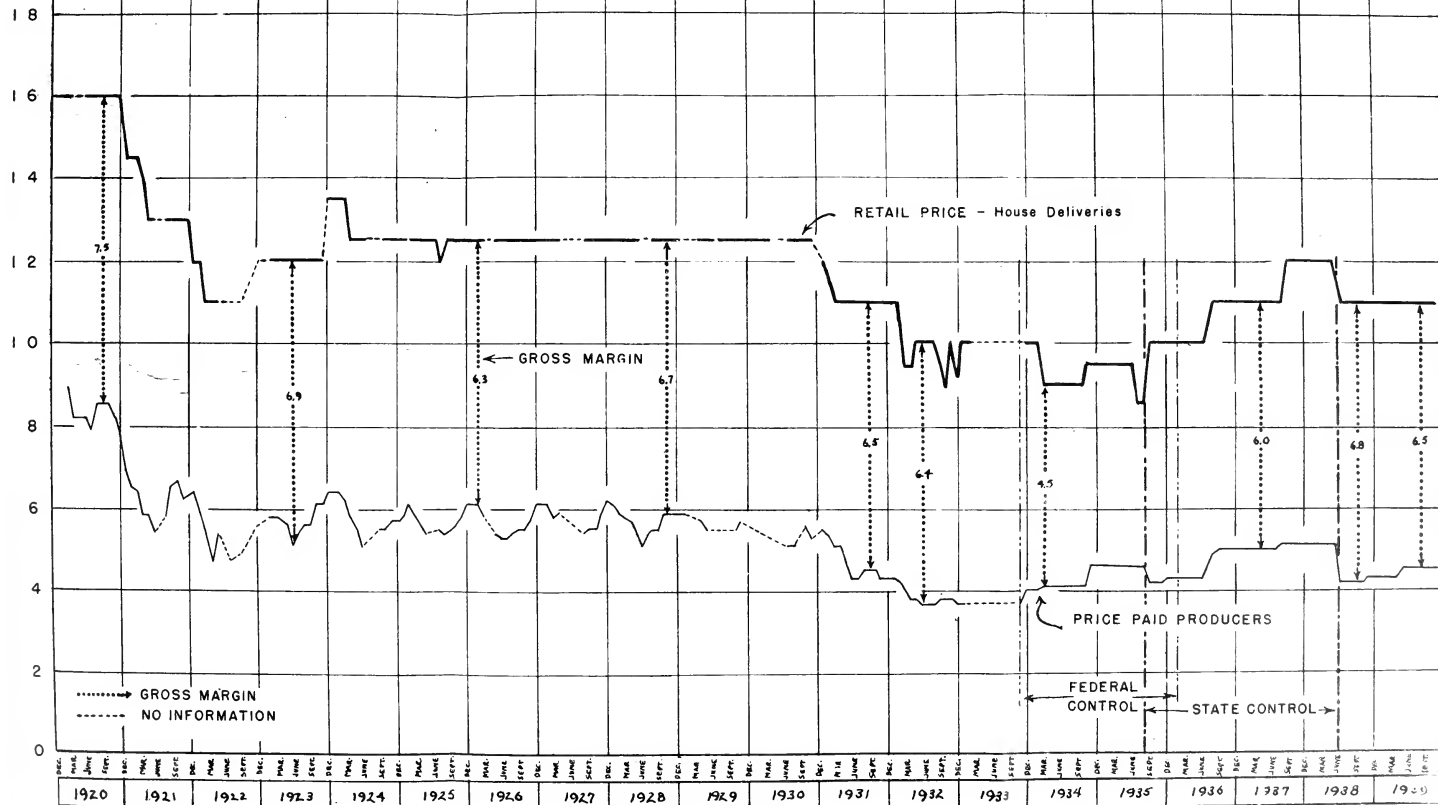


CHART VII

Fluid Milk Prices in Evansville, Ind., 1920-39

CENTS PER
QUART

and retail delivery price. This differential applied only to cash and carry sales and was 1 cent per quart.

The retail store margin (difference between wholesale price and retail store price) was 2 cents per quart in 17 markets and 1½ cents in 2 markets, namely, Fort Wayne and Indianapolis.

It seems likely from these data that State control has been a standardizing influence on retail prices and has tended to prevent any differentials in price developing between home delivery and sales through retail stores. This conclusion is based only on the unlikelihood of so much uniformity in retail practices and prices existing without some central controlling force.

The number of licensed producer-distributors in these markets dropped from 2,535 in 1936 to an estimate of less than 1,500 in 1939. The reasons for this change are not entirely clear. One explanation given is that producers have found more satisfactory and profitable market outlets as regular producers under State control and have therefore given up the distribution end of their business. It is possible that changes in health regulatory standards or in their enforcement have been a factor. Moreover, it is not known whether there was as complete licensing of producer-distributors in 1939 as in 1936. This in itself might be a considerable factor in territories outside the principal cities. Comparatively little change was reported in the number of regular distributors.

Summary.

Producer prices and producer incomes appear to have been enhanced at least to some small extent in a score of markets as a result of State control of milk prices in Indiana. This added farm income has probably come from higher resale prices than would otherwise have prevailed. Perhaps milk production has been increased somewhat because of favorable prices for a limited number of producers. The sanitary conditions under which milk is produced and distributed appear to have been improved in one or more markets. Distribution margins do not appear to have been reduced under State control. In fact some of the evidence, such as for Evansville, indicates that the program has worked in the opposite direction. Milk sold through retail stores has been priced the same as for home delivery in every market but one. No doubt this policy has tended to favor a retail delivery system of distribution.

APPENDIX TO CHAPTER IV

TABLES GIVING DATA ON MILK PRICES IN INDIANAPOLIS AND EVANSVILLE, IND.

TABLE I.—*Monthly average retail price of fluid milk (house deliveries), Indianapolis, Ind., 1920-39*¹

[Cents per quart]

Year	January	February	March	April	May	June	July	August	September	October	November	December
1920	14	14	14	14	14	14	14	14	14	14	14	14
1921	14	14	13	13	13	12	12	12	12	12	11-12	11
1922	11-12	11	11	10-11	10-11	10	10	10	10	10	10	10
1923	10	12	12	12	12	12	12	12	12	12	12	12
1924	12	12	12	12	10-12	12	12	12	12	10-12	12	12
1925	12	10-12	9-11	9-11	9-11	9-11	9-11	11	12	12	12	12
1926	12	12	12	12	12	12	12	12	12	12	12	12
1927	12	12	12	12	12	12	12	12	12	12	12	12
1928	12	12	12	12	12	12	12	12	12	12	12-13	13
1929	13	12	12	12	12	12-13	12	12	12	12	12	12
1930	12	12	12	12	12	12	12	12	12	12	12	12
1931	11	11	10	10	10	10	10	10	10	10	10	10
1932	10	10	7-10	10	9-10	10	10	10	8	9	9	9
1933	9	6-9	9	7-8	8	8	8	9	9	9	9	9
1934	9	9	9	9	9	9	9	9	9	9	7-9	10
1935	10	10	10	10	10	10	10	10	10	10	10	10
1936	11	11	11	11	11	11	11	12	12	12	12	12
1937	12	12	12	12	12	12	12	12	12	12	12	12
1938	12	12	12	12	12	12	12	12	12	12	12	12
1939	12	12	12	12	11	11	11	11	11	11	11	11

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.

TABLE II.—*Dealers' monthly average buying price for basic milk (4.0 percent), Indianapolis, Ind., 1920-39*¹

[Cents per quart]²

Year	January	February	March	April	May	June	July	August	September	October	November	December
1920		7.8	7.5	7.3	7.1		7.1	7.8	7.2	7.7	7.3	7.1
1921	6.6	6.5	5.8	5.6	5.1	4.3	4.3	4.8	4.8	4.9	4.9	4.6
1922	4.8	4.5	4.5	4.2	4.0	4.0	4.1	4.1	4.2		4.9	5.6
1923	5.6	5.4	5.6	5.6	5.6	5.4	5.4	5.6	5.6	5.6	5.6	5.6
1924	5.6	5.6	5.6	5.1	5.1	4.5	4.1	4.1	4.3	4.5	4.5	4.7
1925	4.7	4.7	4.3	4.3	4.3	4.3	4.5	4.7	4.7	4.7	5.1	5.1
1926	5.1	5.1	4.9	4.7	4.5	4.5	4.5	4.7	4.7	4.7	5.1	5.4
1927	5.4	5.4	5.1	5.1	5.1	4.9	4.9	5.1	5.1	5.1	5.1	5.1
1928	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.6	5.6	5.8
1929	5.7			5.6	5.1	5.1	5.1	4.9	5.1	5.1	5.1	5.3
1930	5.3	4.7	4.7	4.7	4.7		4.3	4.3	4.7	4.7	4.3	
1931	4.3	4.6	4.1	4.1	4.1	3.5	4.1	4.1	4.1	4.1	4.1	4.1
1932	3.4	4.1	3.2	3.2	3.4	3.4	3.5	3.7	3.0			
1933	3.3	3.4	3.2	2.9	2.4	2.3	2.9	3.4	3.4	3.4	3.3	3.3
1934	3.3	3.3	3.3	4.2	4.2	4.2	4.2	4.2	4.2	3.7	3.5	4.0
1935	3.8	3.8	3.8	3.8	3.8		4.3	4.3	4.3	4.2	4.2	4.2
1936	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.8	5.8	5.8	5.8	5.8
1937	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1938	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
1939	5.7	5.7	5.7	5.7	5.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0

¹ Computed from prices of 3.5 percent basic milk published in Monthly Fluid Milk Market Reports of Bureau of Agricultural Economics and Agricultural Marketing Service, U. S. Department of Agriculture.

² Price per hundredweight divided by 46.5.

TABLE III.—*Monthly average retail price of fluid milk (house deliveries), Evansville, Ind., 1920-39*¹

[Cents per quart]

Year	January	February	March	April	May	June	July	August	September	October	November	December
1920.....	16	16		16	16	16	16	16	16	16	16	16
1921.....	14½	14½	14½	14	13	13		13	13	13	13	13
1922.....	12	12	11	11	11		11		11			12
1923.....		12	12	12	12	12	12	12	12	12		13½
1924.....	13½	13½	13½	12½	12½	12½			12½	12½	12½	12½
1925.....	12½	12½	12½	12½	12½		12½	12	12½	12½	12½	12½
1926.....	12½	12½	12½		12½	12½	12½	12½	12½	12½	12½	12½
1927.....	12½	12½	12½	12½			12½	12½	12½	12½	12½	12½
1928.....	12½	12½	12½	12½	12½	12½	12½	12½	12½	12½	12½	12½
1929.....	12			12½	12½	12½	12½	12½	12½	12½	12½	12½
1930.....	12½	12½	12½	12½	12½		12½			12½	11	
1931.....	12	11-12	11	11	11	11	11	11	11	11	11	11
1932.....	11	11	9-10	9-10	10	10	10	10	9-10	8-10	10	9-10
1933.....	10										10	10
1934.....	10	10	9		9	9	9	9	9	9½	9½	9½
1935.....	9½	9½	9½	9½	9½	9½	8½	8½	10	10	10	10
1936.....	10	10	10	10	10	10	10	11	11	11	11	11
1937.....	11	11	11	11	11	11	11	11	12	12	12	12
1938.....	12	12	12	12	12	11	11	11	11	11	11	11
1939.....	11	11	11	11	11	11	11	11	11	11	11	11

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.TABLE IV.—*Dealers' monthly average buying price for basic milk (4 percent), Evansville, Ind., 1920-39*¹[Cents per quart]²

Year	January	February	March	April	May	June	July	August	September	October	November	December
1920.....			8.9	8.2	8.2	8.2	7.9	8.5	8.5	8.5	8.2	7.8
1921.....	6.9	6.5	6.4	5.8	5.8	5.4	5.4	5.8	6.5	6.6	6.2	6.3
1922.....	6.4	5.9	5.4	4.7	5.4		4.7		4.9			5.6
1923.....		5.8	6.8	5.7	5.6	5.1	5.4	5.6	5.6	6.1	6.1	6.4
1924.....	6.4	6.4	6.2	5.8	5.5	5.1			5.5	5.5	5.7	5.7
1925.....	5.8	6.1	5.8	5.6	5.4		5.5	5.4	5.5	5.6	5.8	6.1
1926.....	6.1	6.1	5.8		5.4	5.3	5.3	5.4	5.5	5.5	5.7	6.1
1927.....	6.1	6.1	5.8	5.9				5.4	5.5	5.5	5.8	6.2
1928.....	6.1	5.9	5.8	5.7	5.4	5.1	5.4	5.5	5.5	5.9	5.9	5.9
1929.....	5.9			5.7	5.5					5.5	5.7	
1930.....							5.1	5.1		5.6	5.3	
1931.....	5.5	5.4	5.1	5.1	4.7	4.3	4.3	4.5	4.5	4.5	4.3	4.3
1932.....	4.3	4.2	4.0	3.8	3.8	3.7	3.7	3.7	3.8	3.8	3.8	3.7
1933.....	3.7										3.7	4.0
1934.....	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.6	4.6
1935.....	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.2	4.2	4.2	4.3
1936.....	4.3	4.3	4.3	4.3	4.3	4.3	4.5	4.9	5.0	5.0	5.0	5.0
1937.....	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.1	5.1	5.1	5.1
1938.....	5.1	5.1	5.1	5.1	5.1	4.2	4.2	4.2	4.2	4.2	4.3	4.3
1939.....	4.3	4.3	4.3	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5

¹ Computed from prices of 3.5 percent basic milk published in Monthly Fluid Milk Market Reports of Bureau of Agricultural Economics and Agricultural Marketing Service, U. S. Department of Agriculture.² Price per hundredweight divided by 46.5.

CHAPTER V¹

STATE CONTROL OF MILK PRICES IN WISCONSIN

HISTORICAL DEVELOPMENT

State control over the purchase and distribution of fluid milk and cream was probably undertaken earlier in Wisconsin than in any other State. It began in November 1932 when the State department of agriculture and markets² issued an order for the Milwaukee market. This action was taken under the broad powers for the regulation of unfair competition and unfair trade practices.³ Under this authority the department ruled that the bargaining of producers and dealers set the standards of fair competition and fair practices, that is, when producers and dealers handling 90 percent of the milk in a market agreed upon a marketing plan and upon prices it was declared to be unfair competition for the remaining small minority to operate under any other plan or to buy and sell milk and its products at lower prices. Thus the price at which a dealer bought or sold milk was considered as much a question of trade practice as was the manner in which he solicited business or operated his plant.

Special control legislation was enacted in April 1933 (sec. 99.65) giving the department of agriculture and markets power to fix both producer prices and resale prices of milk. Only minimum prices were fixed. No separate administrative body was set up. In June 1933 further legislation (sec. 99.43) was enacted requiring the department to license milk distributors in regulated areas. This licensing was mainly for the purpose of effectuating the price control program. This latter legislation also prescribed license fees and penalties and granted the department the power to suspend the license of any dealer not complying with the provisions of the act. Procedure that should be followed in the suspension of licenses and procedure for appeal by an aggrieved party were outlined in some detail and were taken for the most part from other statutes. The findings of fact by the department acting within its powers were declared to be conclusive in the absence of fraud. The act further prescribed that the court might confirm or set aside any order by the department, but the same should be set aside only upon the following grounds:

1. That the department acted without or in excess of its powers.
2. That the order was procured by fraud.
3. That the findings of fact by the department did not support the order.

The above legislation was regarded as emergency legislation and was of temporary character to expire in 1935. However, it was reenacted with some changes in 1935 for another 2-year period. In 1937 the

¹ This chapter was written by Mr. R. K. Froker. Much helpful information was obtained from W. L. Witte, L. G. Kuennig, and Elmo Eke of the Wisconsin State Department of Agriculture.

² The name of this department was changed by the 1939 legislature to the Wisconsin State Department of Agriculture.

³ Wisconsin Statutes for 1931, ch. 99, sec. 99.14.

milk control legislation was further extended to expire on or before December 31, 1939.⁴ Again during the legislative session of 1939, the milk price control provisions were extended for another 2-year period until December 31, 1941.⁵ In the latter extension the act was declared to be applicable only to counties having a population of 70,000 or more and to cities outside such areas having a population of not less than 10,000.

Organized producers supplying fluid milk markets in the State were generally back of the milk control legislation, particularly in 1933 and 1935. There was some difference of opinion among these producer groups as to the desirability of milk control in 1937 and again in 1939, although most of them were decidedly in favor of its continuance. The Wisconsin Council of Agriculture, composed of both fluid milk producers' associations and other farm organizations in the State, gave this legislation its support.

There has been a certain amount of opposition among patrons and operators of cheese factories and creameries to the State control program for fluid milk markets. This opposition was based largely on the ground that the State was raising prices in fluid milk markets which tended to curtail consumption, increase production and throw additional supplies of milk into manufactured channels. This opposition was never great enough seriously to hamper the administration of the program, but was largely responsible for delaying the passage of the milk control bill in 1939 and for the modifications that were made in the law before it was finally extended.

Fluid milk distributors have been generally favorable to the milk control legislation and to its continuance. They were particularly favorable during the earlier period of the program. The State association of fluid milk distributors actively supported the legislation even in 1939. While distributors were generally favorable to the program it is a known fact that a number of them, particularly large ones, were critical of the administration of the program, feeling that violators were not immediately and vigorously prosecuted and that this lax enforcement tended to work against the reputable distributor and in favor of those who sought to take advantage of the program.

Organized labor has not been particularly active in the promotion of this type of legislation, although it has generally been regarded as favorable to it. The support of labor was, however, a factor of considerable importance in the renewal of the milk control law in 1939.

PURPOSE AND OBJECTIVES

The legislative purpose of the milk control laws of Wisconsin was probably more fully stated at the time of extension of this legislation in 1935 than previously. The introductory part of the 1935 law was as follows:

100.03. EMERGENCY REGULATION OF THE DISTRIBUTION OF MILK IN CERTAIN MUNICIPALITIES. (1) (a) It is declared that the provisions of this section are made necessary by a public emergency existing since November 1, 1932, growing out of the present economic depression, the present financial condition of the farmer delivering milk to certain municipal markets, unfair methods of com-

⁴ In 1935 sections 99.165 and 99.43 were renumbered as sections 100.03 and 100.04, respectively. In 1937 section 100.04 was repealed and the licensing provisions incorporated in section 100.03.

⁵ Unless the department shall determine earlier "that economic unbalance or unemployment no longer so materially interferes with the ability to produce, to consume, to bargain, or to deal in the production or distribution of fluid milk in Wisconsin. . . ."

petition of certain dealers purchasing, receiving or handling milk in such markets, a condition seriously affecting and endangering the public welfare, health and morals, which continues to exist and has been aggravated by the great drought of 1934.

In renewing the milk control legislation in 1937 the legislature tied its control program more definitely to the idea of unfair competition and unfair trade practices than was apparent even in 1935. Emergency and temporary features were continued. The following is an introductory paragraph of the 1937 law:

100.03 (1) It is declared: In the economic depression, much of the business of fluid milk distribution in Wisconsin was becoming affected with unfair methods of competition and unfair trade practices that threatened the financial demoralization of producers and dealers, the continued ability of producers to produce an adequate supply of milk of a sanitary and safe quality and of dealers to distribute it in a sanitary and safe manner, and the public health and welfare; and that created a great and pressing public need for special regulation to eliminate and prevent such methods and practices. Such regulation under the milk control statutes of 1933 and 1935 measurably stabilized the business and prevented much of the threatened results. Such need measurably continues, however, and will continue with the same threatened results, if regulation is relaxed, so long as economic unbalance or unemployment materially interferes with the ability to produce, to consume, to bargain, or to deal in the production or distribution of fluid milk in Wisconsin.

No precise definition of "unfair trade practices" is given in the law and there would probably be wide differences of opinion even among men familiar with the dairy industry as to exactly what is included in "unfair" practices. Moreover, the manner in which such practices affect the incomes and welfare of producers, distributors and consumers is not clear. The reason for tying the milk control program to the regulation of unfair competition and unfair trade practices would appear to be that the Department of Agriculture and Markets has had functions of this type for several years. With this milk control legislation tied to trade practices and competition it might be looked upon as merely extending a type of control already existing rather than as developing an entirely new type of regulation. It would also be consistent with the early efforts of the department to regulate milk prices as a trade practice before special milk control legislation was enacted.

The primary purposes of the legislation are undoubtedly to aid producers in the fluid milksheds in the State and to stabilize fluid milk markets as far as possible. Any benefits to distributors and employees have come under the second objective. Stability has probably been thought of in terms of conditions existing prior to the depression rather than stability in terms of more recent economic conditions.

EXTENT OF STATE CONTROL

State control over the marketing of fluid milk included 33 market areas in Wisconsin in July 1939.⁶ (See table 14.) Most of these markets were confined to single cities with the market boundaries extending well beyond the corporate limits of the respective cities. Some market areas such as Milwaukee and Appleton include not only the principal cities from which they derive their names, but also nearby cities and villages. The Milwaukee County and the adjoining tier of townships on the north and on the west with the exception of

⁶ One of these areas, namely Manitowoc-Two Rivers was divided into two separate control areas in September 1939, making a total of 34 market areas.

the village of Menominee Falls. Oneida and Vilas Counties in northern Wisconsin are included in one market with the exception of the city of Rhinelander for which a separate order was issued.⁷

TABLE 14.—Markets under State control, date of first orders, average daily receipts of milk and percentage used for fluid milk and cream and for manufactured products, Wisconsin, 1939

	Date of first order	Average daily receipts (pounds)	Utilization	
			Milk and cream (percent)	Manufactured (percent)
Appleton.....	Aug. 21, 1933	107,291	31	69
Ashland.....	Mar. 22, 1934	11,536	68	32
Beaver Dam.....	Aug. 9, 1934	10,190	79	21
Beloit.....	Aug. 15, 1933	53,958	42	58
Berlin.....	Oct. 1, 1936	3,318	71	29
Chippewa Falls ¹	Sept. 1, 1936	14,890	59	41
Columbus ¹	July 12, 1935	2,149	97	3
Eau Claire.....	Sept. 6, 1933	41,014	68	32
Fond du Lac.....	Jan. 24, 1934	33,415	70	30
Green Bay-DePere ²	Nov. 1, 1933	64,697	67	33
Janesville.....	June 19, 1933	23,641	65	35
Kenosha.....	June 30, 1933	67,764	51	49
Madison.....	May 31, 1933	133,870	65	35
Manitowoc-Two Rivers ³	Aug. 21, 1933	53,020	49	51
Marinette-Peshtigo.....	Mar. 24, 1934	20,961	58	42
Marshfield ¹	July 1, 1935	7,774	78	22
Merrill ¹	Aug. 9, 1934	6,265	88	12
Milwaukee.....	Nov. 26, 1932	919,006	64	36
Neenah and Menasha.....	Oct. 24, 1933	101,425	17	83
New London ¹	June 17, 1936	3,323	86	14
Oconto ¹	Sept. 16, 1936	3,602	81	19
Oneida and Vilas ⁴	July 1, 1935	17,731	81	19
Oshkosh.....	Sept. 1, 1933	46,115	73	27
Portage ¹	Oct. 1, 1934	6,593	89	11
Racine.....	Oct. 3, 1934	129,100	44	56
Ripon ¹	Oct. 1, 1936	4,047	83	13
Shawano ¹	July 31, 1935	5,390	81	19
Sheboygan.....	Aug. 21, 1933	107,971	34	66
Stevens Point.....	June 5, 1934	15,828	83	17
Waukesha.....	Sept. 16, 1933	17,984	77	23
Watertown.....	Sept. 16, 1933	10,615	84	16
West Bend ¹	July 1, 1935	6,103	83	17

¹ Discontinued Oct. 17, 1939, because of change in law excluding counties of less than 70,000 population and cities outside such counties having less than 10,000 persons.

² 1937 figures.

³ DePere was included in the Green Bay market except for a period from June 21, 1935, until Dec. 1, 1937.

⁴ Two Rivers was given a separate order, Sept. 1, 1939.

⁵ Data on receipts and utilization include Rhinelander for which a separate order was issued on May 1, 1938.

Approximately 1,400,000 consumers are affected directly by these 33 orders. Over half of this number, or 725,000 persons, are in the Milwaukee market. Other areas range from about 70,000 at Racine down to 3,000 at Columbus. The fluid cream and fluid milk under State control in 1938 averaged about 1,000,000 pounds per day, or 365,000,000 pounds per year. The total including surplus milk was about twice these amounts.

State control is relatively less important in Wisconsin than in many other States. Although Wisconsin produces about 11 percent of the Nation's milk supply—a larger percentage than any other State—only 6.5 percent of the State's production is sold as fluid milk and fluid cream for use within the State. Another 7.9 percent is shipped out of the State as milk and cream.

⁷ Orders for 13 market areas were discontinued on October 17, 1939 because of the change in the law restricting such regulation to counties of not less than 70,000 persons and to cities of 10,000 or more located outside such counties. These 13 markets have only about 6 percent of the persons and roughly the same percentage of milk under control. Some of the other markets may also be affected through a restriction of market boundaries to comply with the new law.

Of the 740,000,000 pounds of milk distributed annually as fluid milk and cream within the State about 50 percent was under State control in 1938. On the other hand, of the total milk produced in the State for all purposes only about 6 percent is under State control. This latter percentage includes surplus milk under State control.

Of nearly 900,000,000 pounds of milk shipped as milk and cream outside the State practically none was under Federal control in 1938. However, with the instigation of the Federal order for the Chicago market on September 1, 1939, probably half of these out-of-State shipments came under Federal control. This is because Chicago is practically the only out-of-State market to which fluid milk is shipped and one of the most important for fluid cream. Federal control is also in effect in the Twin City market (Minneapolis and St. Paul), and in the Dubuque (Iowa) market but neither of these two receive any appreciable percentage of their milk and cream from Wisconsin farms.

STANDARDS OF OPERATION

Under the 1935 and 1937 laws the Department of Agriculture and Markets had jurisdiction upon its own initiative or upon petition to inquire into and determine what markets should be regulated in the State and practically to prescribe the terms and conditions of such regulation. The 1937 legislation specifically granted the department the power—

to prescribe such terms and conditions for the purchasing, receiving, handling or selling of regulated milk in any such market as it shall find necessary to eliminate unfair methods of competition or unfair trade practices, which terms and conditions may include schedules of prices for producers, dealers, and consumers, or either, and labeling. The department may include in its orders provisions reasonably necessary to prevent circumvention of such terms and conditions. In prescribing such terms and conditions the department shall consider among other things the terms of any collective bargaining agreement arrived at between producers and dealers. ((5)(a) of section 100.03.)

It is obvious from the foregoing that the department was given broad general powers but that the legislation itself did not go far in specifying the limits under which it might operate. For the standards or criteria which the Department used in its regulatory program one must look to the series of orders and amendments which were issued for the various markets in the State. The remainder of this section takes up several phases of the program to show as far as possible the policies and standards used with respect to each of them.

Fluid Milk Prices.

Apparently the department in its earlier orders relied largely upon the ability of the producer associations and most of the distributors in the respective markets to agree upon prices to producers. Customer and prevailing prices were undoubtedly also factors that were considered. Several of the first orders specified that the various prices would be "bargained" prices effective on the whole market when producers and distributors handling 90 percent of the milk in the market agreed upon such prices.

Cost of production and cost of distribution soon became items that were given considerable attention. At several hearings a mass of testimony was developed with respect to the cost of producing and distributing milk and in at least one market (Beloit) the department arrived at what it considered was the average production cost in that

market.⁸ A rise of 40 cents per hundredweight in the price of class I milk in the Milwaukee and Waukesha markets on August 1, 1936, after a similar rise 2 weeks earlier, was justified entirely on the basis of a rise in the average cost of producing milk as evidenced by a sharp rise in the price of feeds. Moreover, the department ordered all dealers in these markets to deliver a copy of its findings to each home since resale prices were raised 1 cent per quart on each occasion, equivalent to 46.5 cents per hundredweight of milk. Prices were not fixed at a level which would bring the full cost of production including reasonable wages to the farmer and his family and interest on investment. Rather the cost data were used to justify a rise in price since after the rise the average price was still under the average full cost of producing the milk. Cost of production was a goal to be sought, but not considered possible of immediate attainment.

Later in the control program it appears that competitive conditions within the fluid markets, including competition from milk going into other uses and competition from other food products, were important factors in guiding the department. Arguments along this line were presented to justify the substantial lowering of the class I milk price in several markets (but not all) in April-May 1939. That competition was the determining factor in adjusting prices downward is further evidenced by the fact that where the pressure was greatest such as in Milwaukee and Waukesha the drop was from 2.71 to 2.10 per hundredweight of milk or 61 cents per hundredweight and resale prices of milk were lowered from 12 to 10 cents per quart at retail. These prices were increased to \$2.40 per hundredweight and 11 cents retail on August 7, 1939. In Kenosha and Racine the price was dropped from \$2.75 and \$2.70 respectively to \$2.40 per hundredweight, with an accompanying 1 cent per quart decrease in retail and wholesale prices.

At Madison, on the other hand, the price was permitted to remain at \$2.60 throughout this period. In Two Rivers there was a great deal of agitation with respect to the high price of milk in the summer of 1939. As a result the class I price was dropped on September 1 from 56 to 42 cents per pound of butterfat or a drop of 56 cents per hundredweight and at the same time the retail price was dropped from 10 to 8 cents per quart. These changes in prices were made in Two Rivers but not in Manitowoc, although both markets previously had uniform prices throughout. As a result, separate orders were issued for these two markets from that date on.

It is probably correct to say that (1) custom and bargaining power, (2) cost of production and cost of distribution, and (3) competition have been the three main standards in establishing dealers' buying prices of milk and in fixing resale prices at wholesale and retail. Each of these standards has had first importance over a period of time in about the order named.

It should also be pointed out that there have been wide variations in the fluid milk prices among the various markets. The range in price per pound of butterfat in September 1939 was from 42 cents in the Two Rivers market to nearly 75 cents in the Madison market. This is a range of \$1.05 per hundred pounds of milk. The highest priced market incidentally was one of those showing no change in price in the summer of 1939. The retail price of standard milk in Sep-

⁸ The average cost was stated to be \$1.71 per hundredweight in January 1933.

tember 1939 ranged from 8 cents to 12 cents with most of the markets coming within the range of 9 to 11 cents per quart. This wide range in both producer and resale prices supports the view that local competition was an important factor in the adjustments of prices downward during this period as cost of production and cost of distribution had been the chief arguments for the general rise in price at an earlier date.

Price of Milk Used for Cream.

Up until 1939 the buying price established for milk used for sale as fluid cream (class II milk) was generally the same as for milk used for fluid milk purposes, although a few important exceptions were noted. This policy was apparently based on the premise that the milk for cream purposes had to meet the same inspection requirements as milk for sale as fluid milk, and also that the cost of producing the two was identical.

In the summer of 1939 it appears that the competitive conditions between different uses of milk became a more important factor in arriving at prices for class II milk. With this change in policy the price for milk used as cream was lowered to roughly half way between the price of class I milk and the price of surplus milk. At the same time the resale price of cream at wholesale and retail was also lowered accordingly. The lines of reasoning back of these changes were evidenced in the findings of fact accompanying the orders for many of these markets, of which the following is typical:

The effect of present consumer prices of fluid cream in this market has been to decrease and retard fluid cream consumption during the cheapened cost of other foods and the lessened consumer buying power during the economic recession, with the attendant lessening of fluid volume and decreased producer average price, with the same consumer prices. The high producer price for fluid cream and cream milk are especially inducive to the bringing in of cream from outside the regular fluid market supply, further reducing the fluid percentage and average producer price and presenting added problems of enforcement.

An important exception to the general policies followed in pricing milk for cream purposes has been in the Milwaukee market. Milk for class II purposes has ruled uniformly 25 cents per hundredweight over the manufactured or surplus price during most of the period that this market has been under State control. In the Madison market there is also an exception, although this market has had several changes in its formula for pricing milk for cream purposes. In 1939 this market priced class II milk at the evaporated milk code price for the area plus 25 cents per 100 pounds milk. This was somewhat higher than in Milwaukee due to the lower surplus price in the latter city. In the Kenosha and Racine markets part of the milk for fluid cream was priced the same as for fluid milk, but that which was used for light cream, 18 to 19 percent butterfat, was purchased at surplus milk prices. This was done for competitive purposes.

Method of Arriving at Prices for Surplus Milk.

Twelve different formulas were used to arrive at the price of surplus milk in 33 market areas under State control in July 1939. Some of these showed only minor differences while others exhibited marked variations. In most cases the price was based on butter or cheese or on the price paid at evaporated milk plants. In 7 of the 33 markets the price of surplus milk was based entirely on the average monthly price of cheese as reported for "daisies" and "loughorns" on the

Plymouth market. In 5 markets the price was based primarily on butter. In 11 markets the price was based on the combination of butter and cheese. In the 10 remaining markets the price was based mainly on the evaporated milk formula as set forth in the Federal evaporated milk agreement or on the price actually paid for milk at nearby evaporated milk plants, including premiums, if any.

The most important of these formulas for surplus milk are about as follows:

1. Take 1.2 times the average price of 92 score butter at wholesale in Chicago and 2.4 times the average price of longhorns at Plymouth; add together these amounts and divide the resulting sum by 2 to arrive at the price to be paid per pound of butterfat. This formula was in use in 10 markets through an area across the central part of the state from Eau Claire to Green Bay.

2. Take 2.5 times the average price of daisies and 2.4 times the average price of longhorns; add together these amounts and divide the resulting sum by 2 to give the price to be paid per pound of butterfat. This formula was in use in 7 markets in the cheese-producing areas of the State.

3. Take 3.5 times the average price of 92 score butter at wholesale in Chicago and add the value of skim milk determined from the current prices of skim milk powder, cottage cheese, and condensed skim milk and an allowance for processing and marketing costs. The resulting figure (86 cents in July 1939) is the price per hundredweight of milk testing 3.5 percent butterfat. This formula is important since it is used in Milwaukee, by far the largest market in the State, and is also used in Waukesha. A good deal of criticism has been made of this formula because of the low price it produces and the size of market to which it applies. Outsiders have claimed that this low price results in Milwaukee and Waukesha markets "dumping" their surplus milk in manufacturing channels.

4. The price of milk at evaporated milk plants is determined as follows: Six times the average price of 92 score butter at wholesale in Chicago plus 2.4 times the price of twins at Plymouth and the sum of these divided by 7. Multiply the resulting figure by 3.5 and add 30 percent to give the price per hundredweight of milk testing 3.5 percent fat. Frequently premiums have been paid over this formula price.

The price per hundredweight of surplus milk in controlled markets in Wisconsin ranged from 81 cents to \$1.26 in July 1939, or a range of 45 cents. Fourteen of the markets, however, were within the range of 6 cents, namely, \$1.01 to \$1.07. One reason for the wide variation in price of surplus milk is found in the differences in opportunities for the sale of such milk. The highest prices prevailed in those markets where one or more manufacturing plants were in position to handle all of the surplus milk for the fluid milk market. The lowest prices seemed to prevail in those markets where all fluid milk distributors were expected to handle their own surplus receipts of milk. Naturally some of these fluid milk distributors are not in the best position to dispose of surplus milk in the most efficient and satisfactory manner. Surplus milk up to 10 or 15 percent of the fluid milk and cream sales was priced lower than the remainder of the surplus in four markets. Certainly it would seem to be a sound marketing practice to sell surplus milk at the best possible price.

This can probably be done when the bulk of it is sold only to those well equipped to handle it and only to one or two buyers in a market. The prices prevailing for surplus milk in the 32 market areas for July 1939 are shown in table 15.

TABLE 15.—*Price of surplus milk in 32 Wisconsin fluid milk markets under State regulation, July 1939*

Number of markets	Price of surplus milk per—		Number of markets	Price of surplus milk per—	
	Pound butter-fat	100 pounds of milk testing 3.5 per cent fat		Pound butter-fat	100 pounds of milk testing 3.5 per cent fat
10.....	<i>Cents</i> 28.9	\$1.01	2.....	<i>Cents</i> 24.6	\$0.86
7.....	30.6	1.07	1.....	27.9	.98
3 ¹	23.23	.81	1.....	29.7	³ 1.04
	31.2	1.09	1 ²	33.4	³ 1.17
2.....	25.6	.99	1.....	35.7	1.26
2.....	33.0	1.16	1.....	26.9	.94
2.....	24.9	.87			

¹ Surplus equivalent to 10 per cent of milk and cream sales at lower price; remainder at higher price.

² Surplus equivalent to 15 percent of milk and cream sales at lower price; remainder at higher price.

³ \$1.12 average.

Prices at Grocery Stores and Milk Stands.

Apparently the department has followed a policy of preventing an expansion in sales of milk and cream through grocery stores and milk stands and there is some evidence that the objective has been to reduce these sales to a minimum by eliminating any retail price advantage at grocery stores and in most cases also at milk stands or milk depots. Milk consumption is claimed to be largest under a home-delivery system of distribution—a point on which there is wide difference of opinion. The attempt to promote in this manner the maximum consumption of fluid milk was nevertheless looked upon as a desirable public policy for both the producer and consumer. The Madison, Kenosha, and Janesville markets offer illustrations of this policy since milk stands had a considerable volume of sales in these markets and since there were also differentials in price between store and home delivery sales prior to State control.

In January 1935 the department issued an order for the Madison market which permitted milk stands, but not grocery stores, to sell milk at 1 cent per quart and 1 cent per pint below the home delivery price. Milk stands were also permitted to sell coffee cream at 2 cents per one-half pint and 5 cents per quart below the regular retail price. For whipping cream, this differential was 3 cents and 10 cents respectively. Milk stands, however, were required to make a bottle charge on all sales. An amendment to this order on August 1, 1937, contained the following provision:

b. Bulk sales of milk and cream at retail are prohibited. The retail prices above prescribed shall apply to all sales and deliveries at retail regardless of quantity. All discounts including those heretofore allowed for quantity sales and for sales at milk stands and including discounts to employees and others are prohibited.

Somewhat similar store and milk-stand price differentials were permitted in the Kenosha market up until May 1, 1939, when the

department specified in its order that milk-stand prices should carry the regular retail price, plus a bottle charge, for both milk and cream. To the extent that this bottle charge represented an additional cost or inconvenience to consumers in buying from milkstands, it meant a higher charge for less service than they would have had to pay for milk delivered to their own doorsteps. In the Kenosha market a quantity discount of 1 cent per quart was permitted to continue for a family buying for its own use .85 or more quarts of milk in one calendar month. Store differentials were eliminated immediately under State control.

In the Janesville market somewhat comparable milkstand differentials were permitted until May 1, 1939, when these differentials were eliminated by the department. No store differentials had been permitted in this market since 1933. Apparently one of the factors in reducing both the producer and dealer prices in May 1939, was the milk-stand competition, particularly from outside the market area. Along with the reduction in prices, milk-stand differentials were eliminated and the market area was extended from 1 mile to 5 miles beyond the city limits. The new order noted particularly that four milk stands had been established just beyond one mile of the city limits and that these stands were having sizable sales.

Prior to State control there was no uniformity in prices charged by milk stands in these markets. Their supplies of milk were obtained directly from individual farms and not through producers' organizations. When the stands were located outside of the city limits, the cities themselves had no control with respect to quality and general sanitation. Under the State control, authority over these milk stands was obtained by extending the market area to include the territory in which they were located. Under this program quality standards as well as prices were specified.

It should not be implied from the foregoing that milk stands have been completely eliminated from markets under State control or that price differentials have been abolished in all markets. A few exceptions remain. At Green Bay and Fond du Lac milk stands are still permitted differentials in price. At West Bend a differential of 1½-cents per quart is allowed all cash and carry customers having their own containers at the milk stands. In the Shawano market milk was permitted to be sold where produced to purchasers furnishing their own containers at 2 cents per quart less than the regular sale price, but otherwise no store or stand differentials were permitted in this market. In the Sheboygan market a 4-cent discount per gallon of milk was allowed for sales in bulk, except where local ordinances prohibited the retailing of milk in this manner.

With only one exception the markets under State control permit no store differentials in price compared with home deliveries. In a number of the markets a bottle charge is required on sales through grocery stores and milk stands. A few orders specify that a uniform store bottle shall be used, which is interchangeable among the various dealers.

The handling margin for retail grocery stores was rather generally 1 cent per quart of milk and one-half pint of cream until 1939 when it was increased to 1½ cents. A statement such as the following was included in the findings of fact by the department to justify a change in the store margin in about 20 markets in April and May 1939:

The margin between wholesale and retail dealer prices on the basis of 1 cent per quart is not sufficient to give either a comparable or adequate gross profit to stores, especially in view of the bulk of the article, danger of breakage, necessity of refrigeration, and the margins and comparably small handling costs of canned milk. This narrow grocer margin reflects in lessened volume of fluid milk sold and in more substitution of canned for fluid milk.

Pooling.

The only market in Wisconsin operating on a market-wide pool has been the Madison market. Others have operated on what is known as a dealer pool or producer association pool. Under the dealer pool all producers selling a particular grade of milk to any one dealer receive the same price. Under a producer association pool the milk of all members is priced as though it were going to a single dealer. The only modification to this general explanation is in the case of those markets operating on base-surplus plans under which producers within a pool receive one price for the delivered bases and a lower price for all excess deliveries above their base allotments. In the Madison market special milk such as golden Guernsey, certified, and vitamin D milk were not included in the market pool.

Admission of New Producers.

The department of agriculture and markets has generally taken the position that in administering the milk control law it has had no particular responsibility with respect to the entrance of new producers into fluid milk markets, since the determination of whose milk was to be taken on a market was a bargaining factor entirely between the producers or their associations and the dealers handling the milk. New producers, as the term is used here, means producers who are new in a particular market and not necessarily new in the dairy business. Apparently there were no provisions in any of the orders or amendments issued during 1938 and 1939 that applied directly to new producers. However, some exceptions to this rule were noted in earlier orders issued by the department as the following illustrates:

A 10-cent differential on the plant price will be allowed if the dealer consents to take on no new shippers without the consent of the Milwaukee Cooperative Milk Producers Association. (Contained in amendment No. 1 to General Order No. 44, December 29, 1933, Waukesha market.)

The above provision was included in subsequent orders and amendments for the Waukesha market until October 1, 1936, when this provision was terminated. Restraining factors of another type were found in one of the early orders for the Madison market as the following provisions show:

A grievance committee consisting of five producers, to be appointed by the commission (department), shall be set up to adjust differences between dealers, producers and dealers, and between producers, and no new producers can be added to the Madison market without the written consent of this committee. Any person aggrieved by the action of this committee may appeal from the committee's decision to this commission, and the decision of the commission shall be final and binding on all parties. (Contained in amendment No. 3 to General Order No. 35, April 6, 1934, Madison market.)

No dealer in this market will be allowed to take on new shippers unless the arrangement is approved by this commission; written request for the admission of a new shipper can only be made by a committee appointed by the producers of the dealer wishing to take on the new shipper. All fluid milk and fluid cream requirements shall be taken from each dealer's regular plant receipts or the surplus market milk. (Amendment No. 4 to General Order No. 35, April 19, 1934, Madison market.)

Base Surplus.

The Wisconsin orders have generally permitted the use of a base-surplus plan of paying producers for milk but have not, with the exception of one market, required that any such plan be adopted. The use of a base rating system has thus been left to each dealer and the producers from whom he purchased milk. It should be remembered in this connection that in these markets producers are paid on the basis of an individual dealer pool or on the basis of a pool operated by a producers' association. Each base rating system, however, had to meet with the approval of the department before it could be used in any market under a State order.

In the case of the Madison market after it was placed on a market-wide pool, the allotment of bases was made compulsory and the manner in which such bases were to be allotted was specified in the order. However, no provision was included in the order for allotment of bases to new producers. The following provision was included in the Madison order as amendment No. 4 to General Order No. 35, April 19, 1934:

That bases for producers on this market must be just and equitable, each producer delivering milk to this market shall be given a base, and bases given producers shall be an average of the past 6 years' bases (average monthly production in September, October, and November); if the producer has not been on this market 6 years, then his average base for the years prior to 1933 that he has been on the market shall be multiplied by five and the 1933-base added to the product, and the product divided by six, which shall be his theoretical 6-year average. Bases effective March 1, 1934, under the above plan will be on a 100-percent basis.

Further exception to the general rule that the handling of base rating plans be left to the dealers and producers is contained in the following provision added in an amendment to the Milwaukee and Waukesha orders effective August 7, 1939:

(6) No producer shall be required, directly or indirectly, to deliver his overbase milk as a condition of the receipt of his milk within base by the dealer, but each producer shall be left free to market his overbase milk in any manner that does not bring it into the Milwaukee or Waukesha fluid market, and no dealer shall do anything that tends to hinder or impede such free marketing by a producer of his overbase milk.

Labor.

While the milk control legislation in this State has not dealt directly with wages and other matters pertaining thereto, nevertheless, these orders contain provisions which undoubtedly are factors in the working hours and possibly also in the maintenance of wages in some of these markets.

A provision governing the time at which deliveries of milk may be started in the morning is contained in the orders for several markets and has been in use almost since the beginning of the control work in the State. A typical example is the following taken from an amendment to the order governing the Racine market:

b. Beginning September 27, 1936, no vehicle will be allowed to leave or deliver milk or other dairy products before 6:30 o'clock in the morning.

The time of delivery was, of course, changed in subsequent orders and amendments and governed in part by the season of the year.

In reading the standards of fair practices, which is attached hereto, it will be noted that some of the provisions pertain directly to labor. One of these forbids an expansion of the peddler or vendor system of distribution. This is a standard provision in most of the markets. Further, it would seem that the elimination of differentials in prices

at stores has tended to favor retail drivers as well as the distributors engaged in retail delivery service. Another "fair practice" regulation prohibits the employment of a person over any route where he has been employed by another distributor within 1 year previously. This provision tends to maintain established delivery routes and is designed to regulate competition among distributors and to prevent an employee in one company from selling his "good will" to another company.

While the department has not concerned itself directly with wages, nevertheless, the level of wages in a market has undoubtedly been a considerable factor in arriving at the minimum resale prices to be established in such market. For example, in the Madison market in the spring of 1937, organized labor obtained a general raise in their wages. The department immediately prohibited all discounts both for credit, quantity sales, employee purchases, store sales, etc., in order to help the dealers to meet this wage increase. This action was taken even though the earlier wholesale and retail prices prescribed in the order were minimum prices.

Legal Standards and Enforcement.

Legal standards and legal procedure were outlined more explicitly in Wisconsin legislation than were economic standards. The milk control legislation prescribes that investigations and public hearings shall be made before an order is issued for any market. The procedure for a dealer obtaining a license, procedure for revocation of license, and conditions and procedure for appeals to the circuit court and supreme court are prescribed in considerable detail. The legislation also specifies the conditions under which the court may examine or set aside any order of the department. (See above, p. 163.)

In general it appears that the milk regulatory program has had a favorable legal environment under which to operate. The Department of Agriculture and Markets has had on its staff an assistant attorney general and special counsel to handle the legal end of its milk control administration. The courts have given favorable decisions with respect to the general legislation, although the department received adverse decisions in some cases dealing with technical phases of the administration. There has been no important problem with respect to interstate commerce in the regulated markets in Wisconsin. The only exceptions are in two of the smaller markets, Beloit and Marinette, which are near the border of the States of Illinois and Michigan, respectively. Wisconsin at no time entered into a regulatory program for Superior, since the Duluth and Superior cities are regarded as one market and since there is considerable flow of interstate commerce at this point. Likewise, the State never issued any orders for the La Crosse market on the western border of the State but sought to assist the producers and distributors in this market through conferences and voluntary agreements.

The temporary character of the legislation has no doubt been a factor handicapping to some extent the enforcement of the orders issued by the department, since with temporary legislation there is naturally a tendency on the part of all persons concerned to delay action prompted by the feeling that the program is probably of a temporary character and that the rulings might, therefore, be of minor importance and effective only for a relatively short time. Other difficulties in enforcement undoubtedly arose because of the newness

of this type of legislation, because policies were not clearly defined and because many angles of the program have yet to be tested in the courts. Further, the time required (approximately a year) to carry litigation through for decision by the State supreme court is undoubtedly also a handicap in the administration of this program.

Another administrative and legal difficulty is in establishing facts with respect to violations, particularly in the wholesale trade between the dealer and wholesale customers. It is possible for considerable secrecy to exist in some of the many wholesale transactions. No doubt another factor in enforcement, although less tangible, is the lack of popularity of this type of legislation among customers and the public generally, since they look upon such legislation as a program which increases prices to them and therefore increases the cost of living. However, this feeling is probably tempered somewhat by the general sympathy for dairy farmers in their economic distress. Still another difficulty of enforcement is that of obtaining a good law, clear in purpose, carefully adapted to the needs of the industry and subject to precise interpretation. In enacting legislation there is also a natural tendency to compromise on questions of policy, and milk control acts are usually drafted without proper consideration of the technical phases of the problems involved in fluid milk distribution. These conditions make for legal problems and hamper effective administration.

EFFECTS OF PRICE CONTROL IN WISCONSIN

There follows an endeavor to appraise the regulation of fluid milk prices by the State, from such information as is available. The factual data are by no means as complete as one might wish for this purpose. Conclusions are drawn only on those points where the evidence seems reasonably clear, although not conclusive.

The regulatory program will be considered as it has influenced (1) producer prices and production, (2) wholesale and retail prices and consumption, and (3) market organization and market practices.

Producer Prices and Production.

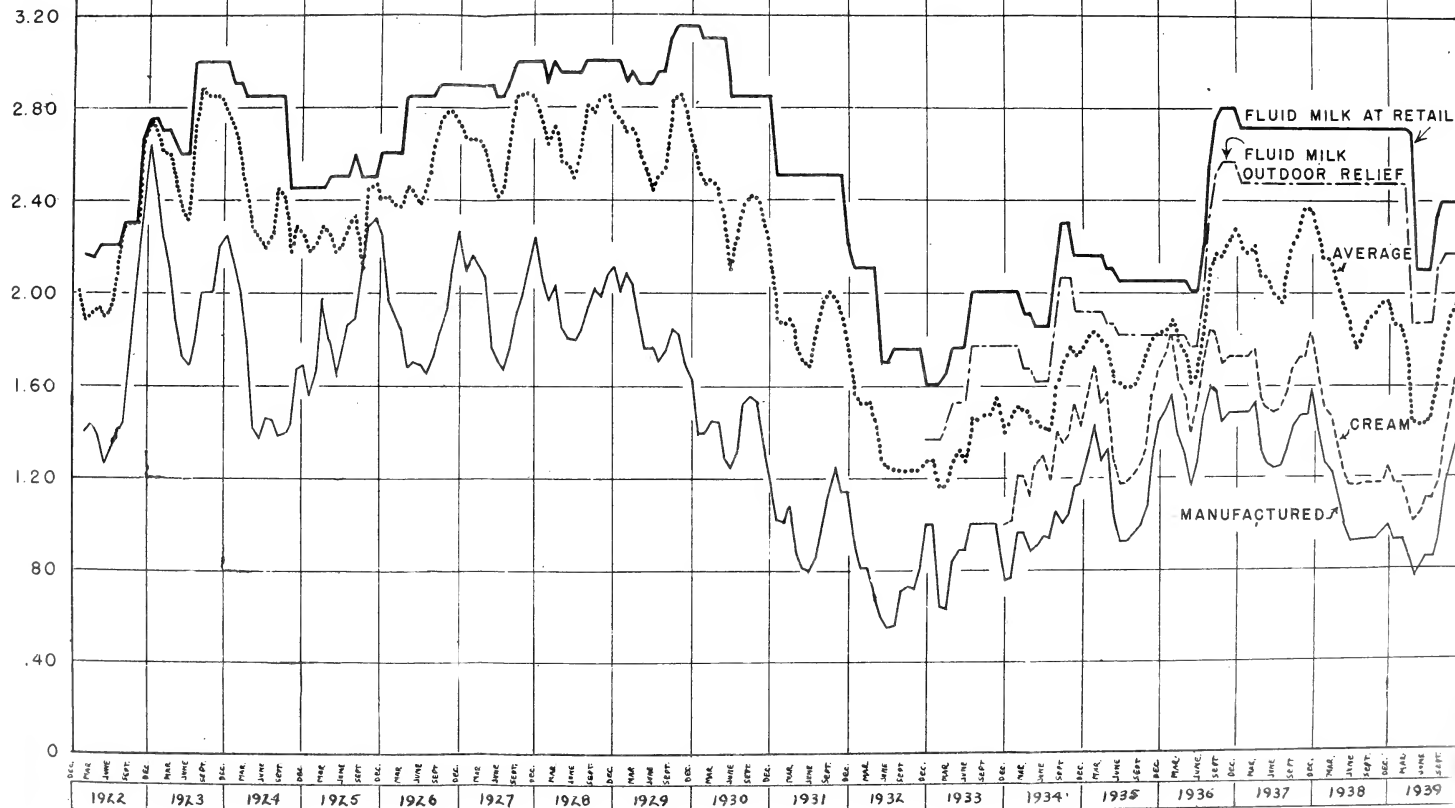
The evidence seems reasonably clear that the price control program in Wisconsin has raised or maintained prices to producers supplying controlled markets above the level that would otherwise have prevailed during most of the time from 1933 to 1939. This has been done mainly through control of class I and class II prices. The trend in prices during the period of control may be shown by an average (unweighted) of the prices of class I milk in 14 markets in each July from 1934 to 1939, inclusive. (See table 16.) The average class I price for these markets was raised from \$1.58 in 1934 to \$2.14 in 1937 and 1938, from which it was lowered to \$1.92 in 1939.

TABLE 16.—Average July price of class I milk in 14 fluid milk markets under State control and the price under the evaporated milk formula, 1934-39

	1934	1935	1936	1937	1938	1939
Average class I price.....	\$1.58	\$1.75	\$1.78	\$2.14	\$2.14	\$1.92
Evaporated milk formula price.....	1.09	1.12	1.56	1.44	1.18	1.03
Difference.....	.49	.63	.22	.70	.96	.89

CHART VIII

Milk Prices to Dealers, by Classes, Milwaukee, Wis., 1922-39

DOLLARS
PER CWT.

For comparative purposes the formula price which is applicable to this region, and which is used in the Federal evaporated milk agreement, is also shown in table 16 for July of each of these years. It will be noted that the class I prices averaged 49 cents over the formula price in July 1934, that this margin was only 22 cents in July 1936, and that it rose to a high of 96 cents in July 1938. The comparatively small premium in 1936 occurred just after a substantial rise in butter and just preceding the rise in the average class I price from \$1.78 to \$2.14 per hundredweight.

The figures for the 14 markets are believed to be typical of all of those under State control, since they cover markets having 75 percent of the total urban population affected directly by this program. Moreover, a simple average of the price for class I-milk in all 33 markets was identically the same as for the 14 in 1938 and showed only a 7 cent difference in 1939. The range of prices for the 33 markets was also substantially similar to the range for the 14 markets.

Classified milk prices for the Milwaukee market are shown for a number of years in appendix to chapter V, table I, and in chart VIII. This market, it will be remembered, handles about 50 percent of the milk under State control in Wisconsin. Since 1932 there have been four milk buying prices in Milwaukee. These cover fluid milk sold in ordinary commercial trade; milk sold for relief purposes; milk used for cream; and the remainder, which is made into manufactured products. Prior to 1933 only two buying prices prevailed. One was for milk sold as fluid milk, and the other price was for all other milk, including that sold as fluid cream.

The premium for fluid milk over manufactured milk has varied from month to month throughout the 18 years covered in appendix to chapter V, table I. However, this premium was unusually high during two periods. The first of these was from late 1929 through 1931, when prices were declining. The class I price (fluid milk), even in the absence of State control, dropped more slowly than the price of milk for manufactured products. The second period of high premiums was from the latter part of 1936 until early in 1939. The premium was made smaller during the summer and fall of 1939 by a lower fluid milk price and by rising prices for manufactured milk. There can be little doubt that State control was a real factor in the maintenance of the relatively high fluid milk price in this market from 1936 to 1939.

Class II milk, namely, milk used for cream purposes, was priced in most markets at the same level as class I milk until April and May 1939, when there was a general lowering of the class II price throughout the State, to reflect competitive conditions. Evidently the price of class II milk had been higher than competitive conditions warranted, even under the stabilizing influence of a control program.

Receipts of milk for each of 30 markets are shown in table 17 for a 4-year period, 1936-39. These data do not indicate any pronounced or consistent rise for the various markets. However, these data alone are not believed to be a complete measurement of the influence of price upon production. While the State orders do not regulate the entrance of new producers in these markets, it is undoubtedly correct to say that the private agencies themselves, particularly the producer associations, have generally sought to exercise some control of this nature. There is normally some turnover of producers in the

market, probably from 5 to 10 percent per year, and unless those dropping out are replaced by new producers the actual number of producers on the market will tend to decrease. Thus the per farm production may increase without showing an increase in total receipts of milk.

TABLE 17.—Average daily receipts of milk by years in 30 Wisconsin markets, 1933-39

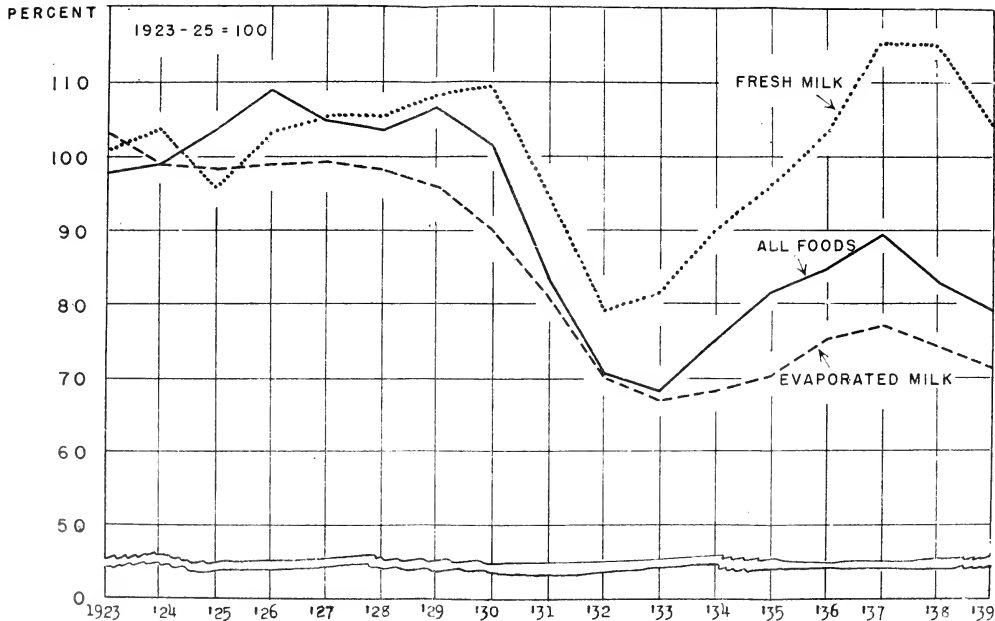
	1936	1937	1938	1939
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Appleton.....	87,057	111,809	107,291	94,366
Ashland.....	12,573	11,239	11,536	13,549
Beaver Dam.....	9,582	10,468	10,190	10,192
Beloit.....	59,464	52,677	53,958	54,718
Berlin.....	3,247	3,261	3,318	3,400
Chippewa Falls.....	13,045	14,890	16,580	17,428
Columbus.....	2,503	2,149	2,225	2,130
Eau Claire.....	37,490	37,615	41,014	46,117
Fond du Lac.....	33,080	31,646	33,451	33,279
Green Bay-De Pere.....	66,950	62,655	64,699	75,884
Janesville.....	23,472	23,931	23,641	22,321
Kenosha.....	70,217	64,782	67,764	73,491
Marinette-Peshtigo.....	17,805	18,753	20,961	20,578
Madison.....	129,610	128,238	133,870	142,123
Manitowoc-Two Rivers.....	47,210	52,120	55,020	56,098
Marshfield.....	8,751	8,095	7,774	9,255
Merrill.....	6,361	6,100	6,265
Milwaukee.....	913,847	885,225	919,006	913,317
Neenah-Menasha.....	81,027	83,470	101,425	115,320
New London.....	3,586	3,556	3,323
Oshkosh.....	42,277	42,696	46,115	44,699
Portage.....	7,201	6,680	6,593	6,857
Racine.....	129,177	123,842	129,190	142,225
Ripon.....	3,200	3,995	4,047	3,893
Shawano.....	5,131	5,051	5,390	5,796
Sheboygan.....	80,255	82,040	107,971	114,725
Stevens Point.....	15,644	15,922	15,828	16,548
Watertown.....	9,618	9,748	10,615	10,450
Waukesha.....	18,879	17,224	17,984	16,630
West Bend.....	6,041	6,103	6,340	6,561

In an attempt to measure such possible developments data were obtained showing the average production per farm by months for a number of years on two of the more important markets in the State. These data are shown in table 18. It will be noted that in the Madison market production per farm showed a substantial increase from 1933 to 1938. It is believed that part of this increase is due to factors other than State control. Demands for higher quality and more uniform production probably tend to make dairying a more specialized business and tend toward the elimination of small farms. Similar developments in the Kenosha market took place earlier and changes in production in this market since 1933 are believed to be due primarily to factors other than State control. This is evidenced by the decrease in production from 1932 to 1935 and the corresponding increase from 1936 to 1939.

Although some qualifications of this character are no doubt necessary it appears obvious that were these markets as readily accessible to producers as are creameries and cheese factories the flow of milk to the fluid milk markets under State control would have shown substantial increases. The Department itself stated in its findings of fact that the prices prevailing early in 1939 were tending to stimulate production and therefore the class I price should be lowered in several of these markets.

CHART X

Retail Prices of Fluid Milk, Evaporated Milk, and All Food Products, Milwaukee, Wis., 1923-39



(See p. 179)

1-61-81-1-19-22

CHART IX

Retail Price and Consumption of Fluid Milk and Factory Pay Rolls, Milwaukee, Wis., 1927-39

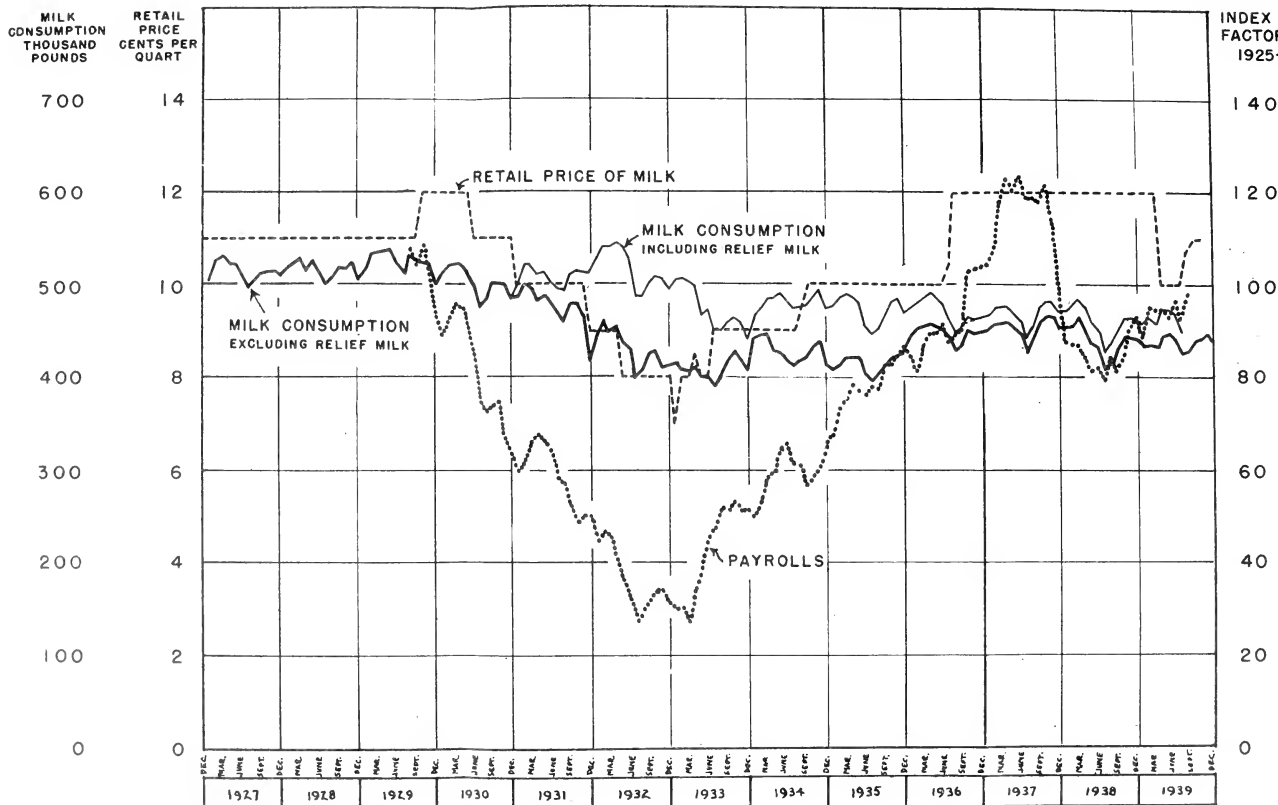
INDEX NUMBERS OF
FACTORY PAYROLLS
1925-1927=100

TABLE 18.—Average daily milk receipts per farm, for 2 Wisconsin markets, 1927-39¹

Market	Year												
	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939
Madison.....	188	179	218	239	234	218	218	241	247	259	257	267	267
Kenosha.....		263	281	308	317	308	296	296	262	276	276	289	306

¹ Data obtained from producer cooperative associations in the respective markets.

Resale Prices and Consumption.

The effect of the price control program upon wholesale and retail prices is less clear than the effect upon producer prices. The movement of the retail delivery price per quart of milk in the Milwaukee market, which is approximately as large as the other 32 markets combined, is shown in appendix to chapter V, table II, and in chart IX. The retail price per quart of milk remained at 11 cents in Milwaukee from May 1926 to August 1929. For a period of 8 months following this the price was 12 cents after which it dropped to a low of 7 cents in January 1933. Following this there was a general upward trend to 12 cents, a price that was maintained from August 1936 to March 1939. From this point it was dropped to 10 cents for about 5 months and then was raised to 11 cents.

The retail price of milk, the quantity consumed, and the index of pay rolls are shown in chart IX for Milwaukee from 1927 to 1939. The price of milk did not drop as much from 1929 to 1933 as did pay rolls, and the price decline that did take place was not sufficient to maintain milk consumption at its previous level in this market. Even with the distribution of relief milk consumption was still below the 1929 level. It appears from chart IX that change in pay rolls alone are not a full explanation of the changes in consumption of milk in Milwaukee since 1929. In fact the per capita consumption is relatively lower in recent years than the chart alone would indicate, since it takes no account of changes in population.

The department of agriculture and markets in its findings of fact stated early in 1939 that the differential in price between canned milk (evaporated milk) and fluid milk was so great as to "produce a large and steady increase in canned milk consumption and largely at the expense of fluid milk consumption." To test this finding we need to inquire into both consumption and retail prices of these products.

Data on consumption of both fluid milk and canned milk in the greater Milwaukee market since 1934 are shown in table 19. It will be noted that there was a slight decline in both the percentage of families using fluid milk and in the average amount purchased by these families. This decrease in per capita consumption since 1934 appears to have been more than offset by the increase in the number of families. (See also chart IX.)

The percentage of families using evaporated milk has increased considerably in Milwaukee from 1934 to 1939 according to table 19. The average purchases per family using this product have also risen. This increase in the use of evaporated milk is a continuation of a trend that had been under way for many years.

A condition which probably accounts for some of the shift from fluid milk to evaporated milk and to other food products in Milwaukee is found in the retail prices of these products. (See chart X.) Fluid milk prices have been relatively higher in recent years than either evaporated milk or other food products in general when compared with the price relations of the twenties. Under these conditions it is to be expected that there would also be some adjustment in retail purchases.

TABLE 19.—*Number and percentage of families using regular milk and canned milk and per family consumption per month, Greater Milwaukee market, 1934-39*

Year	Total number families	Families using—		Family consumption per month ¹	
		Fluid milk (percent)	Canned milk (percent)	Fluid milk (quarts)	Canned milk (cans)
1934.....	184,000	96.9	63.0	49.3	8.8
1935.....	184,877		66.9		10.5
1936.....	186,735	96.6	66.0	48.6	9.6
1937.....	188,148	97.2	66.6	47.4	9.4
1938.....	190,196	96.6	66.8	48.0	9.8
1939.....	192,576	96.0	70.8	48.0	11.0

¹ Includes only families using each product.

Source: Based on an annual survey of about 6,000 consumers, by the Milwaukee Journal, Milwaukee, Wis. The Greater Milwaukee market as used here includes Milwaukee, Shorewood, Whitefish Bay, Wauwatosa, West Allis, Cudahy, and South Milwaukee.

Dealer Margins.

A comparison of the retail price of fluid milk and the price paid producers for that portion of the milk used for class I purposes is shown in chart XI for the Milwaukee market. Home delivery prices and cash and carry store prices for milk have been the same in this market under State control. The price paid by dealers for fluid milk is figured on the basis of milk testing 3.5 percent fat. While the actual test of the milk is slightly higher than this it is believed that the chart reflects correctly the general trend in dealers' operating margins for milk. Although there is a considerable variation in the margin from one period to another it nevertheless appears that the margin 1935-39 has been about 1 cent higher than it was prior to State control and even prior to the depression. The figures do not, of course, prove that this increase in the spread between producer and consumer was due to State control. During the latter period wages were increased substantially to employees engaged in milk plants and in distribution of milk in Milwaukee. This undoubtedly was an important factor in distribution costs. Certainly not all of the increase in spread between producer and consumer, or even the major portion of it, has gone to the distributors in the form of profits. But it is probable that there would have been much more price competition among distributors had there been no State control. Organized labor might also have found it more difficult to maintain its scale of wages if retail and wholesale prices had been left to find their competitive levels.

This study does not include an analysis of distribution margins in other markets in the State. It is probable that they have not shown as much increase, since Milwaukee was generally known as a low margin city for fluid milk prior to State control.

CHART XI
Fluid Milk Prices in Milwaukee, Wis., 1920-39

CENTS PER
QUART

18

16

14

12

10

8

6

4

2

0

RETAIL PRICE - House Deliveries

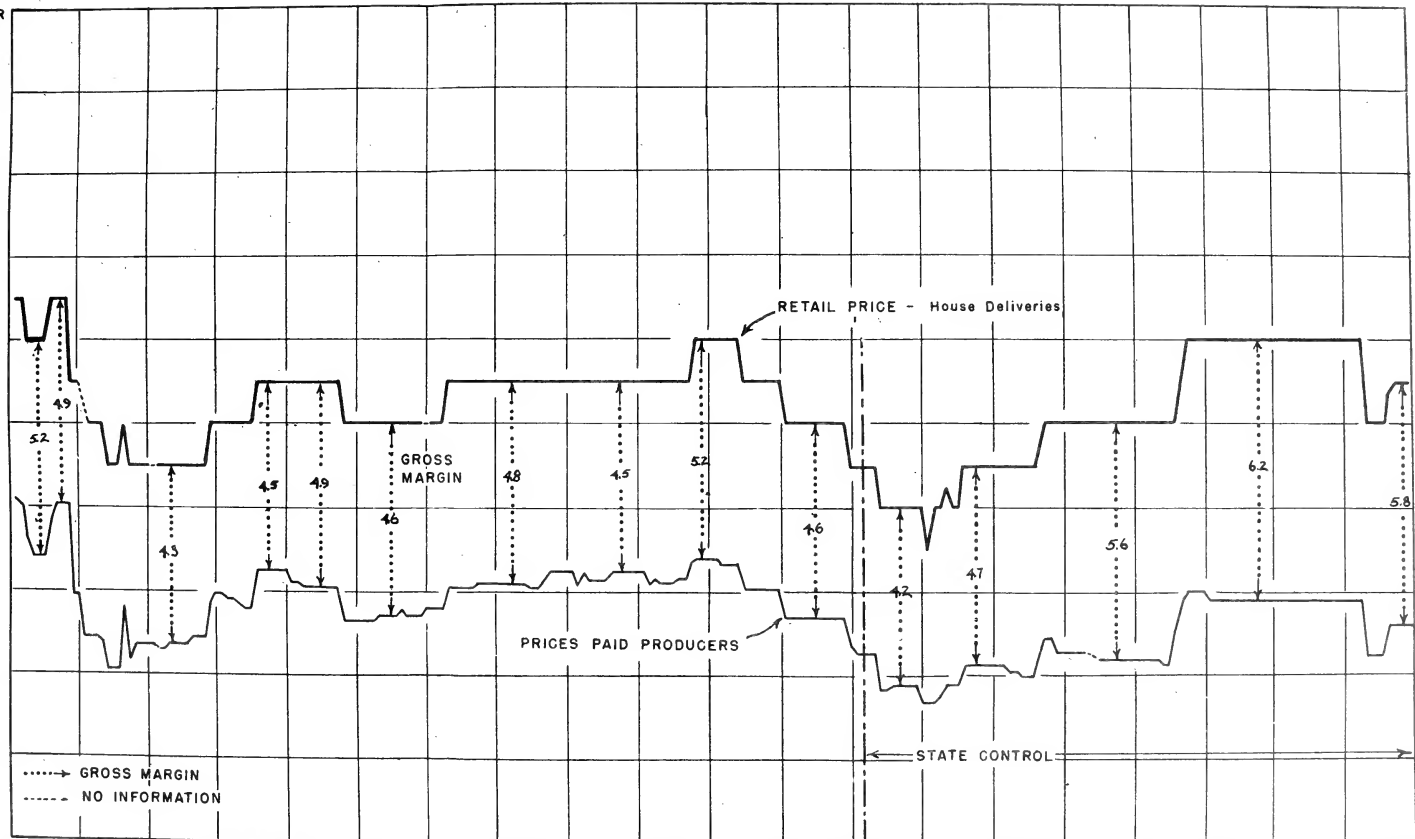
GROSS
MARGIN

PRICES PAID PRODUCERS

.....→ GROSS MARGIN
----- NO INFORMATION

STATE CONTROL

1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939				
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



Market Organization and Market Practices.

Probably as significant as any are the results of State control over the actual methods employed in distribution. Retail sales of milk and cream have been "kept on the wagons" and grocery store sales have been kept at a minimum. This has been done by the simple but effective device of a single retail price regardless of method of sales, cash or credit, or of type of service. Under such a price policy the business tends to go to those offering the most service. The purpose of this policy was ostensibly to promote the greatest consumption of milk by favoring a house delivery system of distribution. It is probable, however, that the stimulus to consumption from lower prices through stores would more than offset the convenience of house delivery. There is nothing inherent in the product to prevent both types of distribution developing simultaneously and leaving the choice of partonage to the consumers.

The competition from outside sources of fluid milk and cream has been curbed to some extent by extending sales areas into the open country, frequently several miles beyond the city limits, and by restricting sales from road-side stands and direct sales from farms to consumers. Part of this action may have been for the purpose of maintaining sanitation and quality standards. The methods used, however, have had more the appearance of economic control than protection of consumers.

There is no clear-cut evidence that the control program has favored the largest distributors at the expense of smaller ones. Fragmentary data seem to indicate that in a few of the larger markets the largest distributors have shown a decline in business while some of the smaller ones have shown increases. It is probable that the very smallest, such as producer-distributors, have found difficulty in expanding or maintaining sales under such a program since they are handicapped in competing entirely on a service basis.

One of the general effects of the milk price control program in Wisconsin has undoubtedly been a tendency to standardize prices and practices in a number of the fluid milk markets in the State. While this report has at times emphasized the wide range in prices and the variation in practices from market to market, it is undoubtedly correct to say that there is more uniformity on some points among many of the markets because of regulation than would have existed without it. The standard of fair practices is quite uniformly applicable to all markets. The fact that 10 markets use identically the same provision for arriving at the price of surplus milk is in itself an indication of the standardizing effect of the program. Likewise, it is not to be expected that grocery stores would sell at retail delivery prices in all of the 33 markets under ordinary competitive conditions. This, however, is not to say that the standardization of practices has been in the right direction. Many would feel that to discriminate against one type of distribution in favor of another should be beyond the scope of an impartial control agency having for its purpose the promotion of fair competition and fair practices. Certainly there is nothing in the legislation itself to indicate the type of retail service that is to be favored.

APPENDIX A

STANDARD OF FAIR PRACTICES IN SELLING OF MILK BY DISTRIBUTORS

After public hearings, the following standard of fair practices in selling of milk by distributors has been adopted by the department of agriculture and markets under the provisions of section 100.20 Wisconsin statutes, and

It is ORDERED that the provisions thereof shall be considered a part of all general orders issued for municipalities under the provisions of section 100.03, Wisconsin statutes, to become effective upon publication of such general orders.

1. It shall be considered an unfair practice for any dealer to give away any products or distribute any products as samples, but this section is not intended to prevent the giving of a sample at the plant to be consumed on the premises.

2. It shall be considered an unfair practice to sell fluid milk or other products under false descriptions, advertising or trade names.

3. It shall be considered an unfair practice to give or pay to any hotel, apartment, or factory owner, manager, janitor, receiving clerk, maid, housekeeper, linen room attendant, or any other person, money compensation, gratuity, free milk, cream or derivatives of milk, or discounts, for either business or information or assistance in procuring business; and each distributor shall discharge any employee guilty of such unfair practice.

4. It shall be considered an unfair practice to pay premiums or allow discounts of any sort to new customers.

5. It shall be considered an unfair practice to give, loan, sell or furnish to customers under any circumstances, ice boxes, ice or other devices or means for refrigeration or insulation.

6. It shall be considered an unfair practice for any distributor to use in the course of his business any bottle, can, or case, the title to which is vested in another person, firm, or corporation, or which bears the trade name, trade mark or designation of any other distributor. It shall be considered an unfair practice for any distributor to sell fluid milk in bottles except in those on which there shall be blown or otherwise noted words appropriately identifying the distributor, and which bottles are sealed with caps bearing words appropriately identifying the distributor. This paragraph shall not apply to milk sold in bottles bearing a trade mark or designation registered in the name of a local milk bottle exchange.

7. Solicitors. It shall be considered unfair practice to use any person as a solicitor unless he is a regular employee of the company.

8. It shall be considered an unfair practice for a distributor to place a salesman or driver on a route which within one year previously he had covered in whole or in part for another distributor.

9. It shall be considered an unfair practice for any distributor to solicit or sell milk or other dairy products either for himself or as agent for another, on any route which within one year previously he had covered in any capacity for another distributor.

10. It shall be considered an unfair practice for any distributor to sell milk or cream over the counter to the retail trade, other than at the retail prices provided for in the order.

11. Except as otherwise provided in any general order of which this Standard of Fair Practices may be a part, it shall be considered an unfair practice for any distributor to sell whole milk to the retail trade in containers other than quarts and pints, or to sell cream to the retail trade in containers other than quarts, pints and half pints; but this does not affect bulk sales where not prohibited by local ordinance.

12. Every distributor shall pay for all milk received by him during the month not later than the 20th day of the following month.

13. Every distributor shall pay for all milk received by him by actual weight and actual test.

14. No distributor receiving milk from a producer through an independent milk hauler shall charge such producer a greater sum for hauling than that actually paid by such distributor to such independent hauler.

15. No distributor shall sell milk to a peddler, whether the peddler is a person, firm or corporation, if the peddler does not own or maintain a plant holding a board of health permit for processing and bottling milk for distribution. This paragraph shall not be construed to prevent a storekeeper from making delivery of milk purchased at his store to the homes of the purchasers. This paragraph shall not pertain to any peddler that was holding the necessary licenses on February 7, 1934.

APPENDIX B

EXCERPTS FROM FINDINGS OF FACT AS STATED IN WISCONSIN MILK ORDERS AND AMENDMENTS ¹

MILWAUKEE ORDER, APRIL 1, 1939

(Consumer prices)

The present schedules of consumer prices in these markets, not having changed with a falling general market, are too far out of line with the price levels in other and particularly competing foods. This, together with a decreased consumer purchasing power, due to a general economic recession, has reduced the volume of total and per capita sales of fluid milk and cream. Meanwhile, the decreasing price of canned milk, and a marked increase in the differential between the price of canned milk and the price of fluid milk, together with the foregoing factors, and larger margins to handlers on canned milk than on fluid milk, has produced a large and steady increase in canned milk consumption, largely at the expense of fluid milk consumption.

(Bootlegging)

These factors have produced also a growing volume of "bootlegging" sales, below the ordered price schedules, particularly by producers in outlying territory, and by producers and others in the downtown wholesale trade, decreasing the effectiveness of enforcement and threatening the stabilization of the market.

(Wholesale prices)

In addition to the foregoing, the present wholesale prices of the higher test fluid cream have not met outside competition of certain manufactured bakery products using considerable quantities of such cream, and have resulted in the loss of a considerable potential volume of sales by dealers in these markets.

(Prices to producers)

The differentials between the prices to producers resulting from the orders in these markets, both fluid and composite, and prices to producers in the condensery, creamery, and butter markets are too great. These two large differentials are in part responsible for an increased per farm production by the producers on the market and an increasing pressure from other farmers to get onto the market, all tending to increase the percentage of surplus or manufactured milk and tending to depress the average or composite price actually received by the

¹ Public hearings are held under secs. 93.18, 100.03, and 100.20 of the statutes of Wisconsin and from these hearings the Commission makes its findings. Most of the excerpts reproduced here are also typical of other market orders. The paragraph headings are not part of the orders.

producers under these two market orders, and to increase slightly the total supply of milk going into butter, cheese, condensery, and other general milk markets, where the supply of milk and surpluses of manufactured products have a continual tendency to depress prices to producers.

To in some measure meet and correct the foregoing, it is necessary to make a basic reduction in the retail quart price of regular milk from 12 to 10 cents, with similar reductions in other items of the ordered price schedules in these two markets.

BELOIT ORDER, MAY 1, 1939

(Consumer prices)

The present schedule of fluid milk prices to consumers in this market, not having gone down with falling prices of most foods, is too far out of line with price levels in other and particularly competing foods. This, together with decreased consumer purchasing power due to economic recession, has had a depressing effect upon total and per capita volume of sales. Meanwhile, a decreasing price of canned milk, and a marked increase in the differential between the price of canned milk and the price of fluid milk has resulted in canned milk displacing consumption of fluid milk.

The effect of present consumer prices of fluid cream in this market has been to decrease and retard fluid cream consumption during the cheapened cost of other foods and the lessened consumer buying power during the economic recession, with the attendant lessening of fluid volume and decreased producer average price, with the same consumer prices. The high producer price for fluid cream and cream milk are especially inducive to the bringing in of cream from outside the regular fluid market supply, further reducing the fluid percentage and average producer price and presenting added problems of enforcement.

(Producer prices)

The differentials between the prices to producers resulting from the orders in these markets, both for fluid and composite, and prices to producers in the condensery, cream, and butter markets, are too great. These two large differentials tend to encourage increased per farm production and increased pressure of other farmers to get onto the fluid market, all tending to increase the ratio of surplus to fluid on the fluid market and to increase correspondingly the average price to fluid market producers without reduction of the consumer price of fluid milk. The encouragement to increased production necessarily is reflected slightly in the volume of milk going into surplus or manufactured products, principally butter, cheese, and condensery, where the supply of milk and surpluses of manufactured products have a continual depressing effect upon prices to milk producers.

(Competition)

The conditions herein found tend to induce "bootlegging" sales by nondealers at such low prices that a false consumer belief in the value and needful price for fluid milk is created. This reduces the volume of regular market sales of fluid milk and depresses the composite

producer price. It also makes it increasingly difficult for licensed fluid milk dealers to maintain in all instances the scheduled prices to consumers, and creates added enforcement problems, both as to consumer price and producer prices. It is necessary to establish the schedules of producer and dealer prices in the attached amendment of the order for this market, to eliminate the unfair methods and practices recited in this paragraph.

(Assured dealer margins)

Assured dealer margin tends to attract additional capital into distribution and to protect its continuance there, and thus to increase the ratio of investment and operations to volume and to increase the per unit cost of distribution. Further so to cause increase in the per unit cost of distribution at this time as to further depress the price to the producer would be an unfair method and practice. To eliminate such method and practice, it is necessary to fix the dealer margin at this time as it is established in the attached amendment to the order for this market.

(Continuation of order necessary)

It has not been shown that the order can be revoked without an immediate recurrence of the unfair and demoralizing methods and practices that preceded the order. A revocation of the order would be followed by an immediate recurrence of those conditions. It is necessary to make the changes that are incorporated in the following amendments of the order, to eliminate unfair methods of competition and unfair trade practices in this market. It is necessary to retain the order as so amended to eliminate unfair methods of competition and unfair trade practices in this market.

APPLETON ORDER, MAY 1, 1939

(Retail store margin)

The margin between wholesale and retail dealer prices on the basis of 1 cent per quart is not sufficient to give either a comparable or an adequate gross profit to stores, especially in view of the bulk of the article, danger of breakage, necessity of refrigeration, and the margins and comparably small handling costs of canned milk. This narrow grocer margin reflects in lessened volume of fluid milk sold and in more substitution of canned for fluid milk. It is not an unfair method or practice to sell at wholesale on the basis of 1½ cents per quart below retail prices, as established in the attached amendment of the order for this market.

JANESVILLE ORDER, MAY 1, 1939

(Milk stands)

The present market area of the city of Janesville and territory within a mile of the city has not been sufficient to prevent, under the conditions herein found, a substantial volume of fluid milk purchases by residents of Janesville from milk stands and farms outside the

area, at prices based more upon the low price of milk for manufacturing purposes than upon fluid market prices, from uninspected farms, and by unsanitary handling. These sales are unfair trade practices in the Janesville market and the prices and practices are unfair methods of competition. To prevent these unfair methods and practices it is necessary to extend the market to include all territory within 5 miles of the boundaries of the city of Janesville. By reason of the facts recited in this paragraph, and the reduction in consumer prices made in the attached amendment to the order for this market, for both milk and cream, it is not necessary to retain a special stand price to eliminate unfair methods and practices in this market, but is necessary to establish in this market the same schedules of retail and wholesale prices for all dealers to eliminate the unfair methods and practices recited in this paragraph. To afford a reasonable notice to the operators of these stands, this change should not take effect until June 1, 1939.

MANITOWOC-TWO RIVERS ORDER, SEPTEMBER 1, 1939

(Outside competition)

An emergency exists in the Two Rivers area of the Manitowoc-Two Rivers regulated market by reason of the unlicensed and illegal selling of fluid milk in the area, just outside the city limits of Two Rivers, at half order prices, the customers bringing their own containers. This has been accompanied by much publicity of misinformation upon the basis of fluid market prices, that has created considerable belief among Two Rivers consumers that order fluid prices are unreasonably high. This has caused a large volume of purchases to go to the cut-rater and has created a condition damaging to the total volume of fluid milk consumption. Pendency of legislation and other causes have prevented early elimination of the illegal selling. To protect the fluid market, and prevent unfair methods and practices that inevitably will flow from the conditions described, it is necessary to lower the resale prices of fluid milk in the Two Rivers area of the market for the time being to the basis of 8 cents a quart retail. This can best be done by creating in that area a separate regulated market. Reduction of the resale prices will necessitate a reduction of the producer price for milk resold as fluid. The reduction made in the following order absorbs a little more than half the resale reduction. Both producers and dealers have indicated their acquiescence in the loss this will entail upon them as a necessity in meeting the emergency and protecting the fluid market.

MILWAUKEE-WAUKESHA ORDERS, AUGUST 16, 1936

(Feed costs make higher milk prices)

Beginning August 16, 1936, at 2 a. m., the price of milk in Milwaukee and Waukesha will be 12 cents per quart, 8 cents per pint.

The current raise in the price of milk is made necessary by a condition of emergency among the farmer-producers caused by the severe drought this summer.

The cost of the feed necessary to the production of milk has doubled in price during the last 6 weeks.

The farmers in the Milwaukee and Waukesha area are receiving all the benefit of this increase.

All Milwaukee and Waukesha milk dealers have been ordered to make the raise in milk price and to deliver this statement to each home.

COLUMBUS ORDER, JUNE 1, 1938

(Outside cream at lower prices)

Comparatively little fluid cream is sold in this market. Very few if any consumers in this market area are in the high income group. Cream is not so much of a necessity as milk, and therefore they are not willing to pay as high a price for butterfat in cream as for butterfat in milk.

Some consumers go outside the market territory and buy cream of comparatively high butterfat test, but of inferior quality, at prices considerably below ordered minimum prices in this market, using it in some cases for churning into butter for their own use, and in some cases for restaurant and confectionery store purposes.

The price of butter for a number of months has been and still is considerably lower than it was when the present cream prices in the market order were established.

Reasonable minimum prices are: For coffee cream at retail, 40 cents a quart, and corresponding minimum prices for other classes, other quantities, and at wholesale.

These reductions will make necessary corresponding reduction in the producer price for butterfat sold as fluid cream. A separate price should be established for this, and a reasonable minimum price is 52 cents a pound butterfat.

RACINE MARKET, MARCH 1, 1937

(Market conditions abnormal)

After due consideration of all the evidence submitted at the recent hearing and the information submitted by the auditor who made the investigation of the market and the results of operations, the commissioners are of the opinion that the conditions and the results of operations for the latter part of the year 1936 are not normal, due to the unsettled conditions caused by the labor strikes. With men out of employment for a considerable length of time, the entire market area was affected. It is believed that the purchasing ability of the many families involved directly or indirectly was such during that period that sales were decidedly below normal. The unfavorable results of operations resulting in many cases for the latter half of the year 1936, it is contended, will not continue in the year 1937 because the labor disputes have now been settled and sales will accordingly come back to normal or better.

The testimony at the hearing clearly showed that there has been no reduction in the cost of producing milk since last summer. For these and other good reasons the price arrangements of the order will therefore be continued in effect until conditions warrant an amendment.

BELOIT ORDER, JANUARY 13, 1933

1. That the people living in the city of Beloit and surrounding community are concerned over the source and condition of their milk supply. That through the agency of impure milk many diseases are disseminated.

2. That the people living in the city of Beloit and surrounding community should be assured of a wholesome supply of milk.

3. That the producer supplying milk for a city market is put to additional expense to put his premises in a sanitary condition. He must use extra care in the handling of the milk to keep it free from contamination.

4. That the farmers who are producing milk for the Beloit market are in such condition financially that they are finding it very difficult to pay their taxes and interest. That they are unable to repair their premises or make needed improvements about the farm.

5. That the cost of producing milk for the Beloit market is approximately \$1.71 per hundred pounds and varies slightly up and down from that figure on different farms.

6. That the producers furnishing milk for the Beloit market find it necessary to regulate their dairy herds in such a way as to insure a steady flow of milk into the market. That this, in turn, increases the cost of production.

7. That the dealers selling milk on the Beloit market, because of their financial condition, cannot sell milk at retail delivered for less than 8 cents per quart without lowering the price paid to the farmers.

8. That there are too many dealers selling milk on the Beloit market which, in turn, gives to each a small volume of business, duplication of routes, and a distribution charge of between 4 and 5 cents per quart.

9. That the dealers buying at least 90 percent of the milk sold on the Beloit market buy their milk from the Beloit local of the Pure Milk Association at a price agreed upon at a bargaining conference between the dealers and the directors of the local association. Until recently there has been a market pool agreement. The producers have now consented to an individual dealer pool agreement which is more acceptable to the dealers than the market pool.

10. That a few dealers have refused to buy according to the agreed plan and have purchased their milk supply in such a way and at a price that will enable them to undersell the other dealers and disturb the stability of the market. That this is particularly true in the present depression.

11. That there seems to be no demand on the part of the consuming public in Beloit for a lower retail price on milk. That 8 cents per quart is a reasonable price to the consumer.

12. That under existing conditions the practice indulged in by the dealers referred to in paragraph 10 is an unfair method of competition and an unfair trade practice, under the provisions of section 99.14, Wisconsin Statutes. That under existing conditions, for all dealers to buy their milk supply on the same plan and at the price not less than that agreed upon between the directors of the association and dealers handling not less than 90 percent of the milk sold on the Beloit market is a fair trade practice.

APPENDIX TO CHAPTER V

TABLES GIVING DATA ON MILK PRICES IN MILWAUKEE, WIS.

TABLE I.—Classified milk prices to dealers, Milwaukee, Wis., by months, 1922-39

[Dollars per 100 pounds]

Milk used for—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
A. Fluid milk:												
1922	2.16	2.15	2.20	2.20	2.20	2.20	2.30	2.30	2.30	2.30	2.65	2.75
1923	2.75	2.70	2.70	2.65	2.60	2.60	3.00	3.00	3.00	3.00	3.00	3.00
1924	2.90	2.90	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.45	2.45	2.45
1925	2.45	2.45	2.45	2.50	2.50	2.50	2.50	2.59	2.50	2.50	2.50	2.60
1926	2.60	2.60	2.60	2.85	2.85	2.85	2.85	2.85	2.90	2.90	2.90	2.90
1927	2.90	2.90	2.90	2.90	2.90	2.85	2.85	2.90	3.00	3.00	3.00	3.00
1928	3.00	2.90	3.00	2.95	2.95	2.95	2.95	3.00	3.00	3.00	3.00	3.00
1929	3.00	2.90	2.95	2.90	2.90	2.90	2.95	2.95	3.10	3.15	3.15	3.15
1930	3.15	3.10	3.10	3.10	3.10	2.85	2.85	2.85	2.85	2.85	2.85	2.85
1931	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.20
1932	2.10	2.10	2.10	2.10	1.70	1.70	1.75	1.75	1.75	1.75	1.75	1.60
1933	1.60	1.60	1.65	1.76	1.76	1.76	2.00	2.00	2.00	2.00	2.00	2.00
1934	2.00	2.00	1.90	1.90	1.85	1.85	1.85	2.08	2.30	2.30	2.15	2.15
1935	2.15	2.15	2.15	2.10	2.10	2.05	2.05	2.05	2.05	2.05	2.05	2.05
1936	2.05	2.05	2.05	2.05	2.00	2.00	2.20	2.40	2.75	2.80	2.80	2.80
1937	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71
1938	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71
1939	2.71	2.71	2.71	2.10	2.10	2.10	2.10	2.34	2.40	2.40	2.40	2.40
B. Manufactured products:												
1922	1.40	1.43	1.38	1.26	1.33	1.38	1.43	1.76	2.00	2.44	2.65	
1923	2.43	2.24	2.11	1.90	1.73	1.69	1.79	2.00	2.00	2.19	2.25	
1924	2.14	1.99	1.79	1.41	1.36	1.46	1.45	1.38	1.39	1.43	1.67	1.69
1925	1.55	1.66	1.97	1.78	1.64	1.76	1.86	1.85	2.09	2.29	2.31	2.25
1926	1.97	1.91	1.84	1.68	1.70	1.69	1.65	1.71	1.83	1.94	2.09	2.26
1927	2.09	2.16	2.11	2.06	1.76	1.70	1.86	1.76	1.91	1.99	2.11	2.24
1928	2.04	1.97	2.04	1.84	1.80	1.79	1.84	1.94	2.01	1.98	2.09	2.11
1929	2.00	2.09	2.03	1.86	1.76	1.76	1.71	1.75	1.85	1.82	1.70	1.62
1930	1.39	1.39	1.45	1.44	1.29	1.24	1.33	1.53	1.55	1.52	1.33	1.17
1931	1.02	1.01	1.08	.89	.81	.80	.86	1.00	1.15	1.25	1.14	1.14
1932	.91	.81	.81	.69	.60	.55	.56	.71	.73	.72	.82	1.00
1933	1.00	.64	.63	.84	.89	.89	1.00	1.00	1.00	1.00	1.00	.75
1934	.77	.96	.96	.88	.91	.95	.94	1.06	1.01	1.04	1.17	1.18
1935	1.32	1.44	1.27	1.33	1.04	.93	.93	.96	1.00	1.08	1.31	1.44
1936	1.49	1.57	1.38	1.31	1.16	1.27	1.46	1.60	1.57	1.45	1.48	1.48
1937	1.48	1.48	1.52	1.31	1.26	1.24	1.25	1.32	1.42	1.47	1.47	1.58
1938	1.39	1.26	1.22	1.11	.99	.92	.92	.93	.93	.93	.97	1.00
1939	.93	.93	.85	.77	.81	.86	.86	.93	1.15	1.28	1.40	1.40
C. Cream:²												
1933												1.00
1934	1.02	1.21	1.21	1.13	1.26	1.30	1.19	1.41	1.36	1.39	1.52	1.43
1935	1.57	1.69	1.52	1.58	1.29	1.18	1.18	1.21	1.25	1.33	1.56	1.69
1936	1.74	1.82	1.63	1.56	1.41	1.52	1.71	1.85	1.84	1.70	1.73	1.73
1937	1.73	1.73	1.77	1.56	1.51	1.49	1.50	1.57	1.67	1.72	1.72	1.83
1938	1.64	1.51	1.47	1.36	1.24	1.17	1.17	1.18	1.18	1.18	1.22	1.25
1939	1.18	1.18	1.10	1.02	1.06	1.11	1.11	1.18	1.40	1.53	1.65	1.65
D. Outdoor relief (fluid milk):³												
1932												1.37
1933	1.37	1.37	1.42	1.53	1.53	1.53	1.77	1.77	1.77	1.77	1.77	1.77
1934	1.77	1.77	1.67	1.67	1.62	1.62	1.62	1.85	2.07	2.07	1.92	1.92
1935	1.92	1.92	1.92	1.87	1.87	1.82	1.82	1.82	1.82	1.82	1.82	1.82
1936	1.82	1.82	1.82	1.82	1.77	1.77	1.97	2.32	2.52	2.57	2.57	2.57
1937	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48
1938	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48
1939	2.48	2.48	2.48	1.87	1.87	1.87	1.87	2.11	2.17	2.17	2.17	2.17
E. All purpose weighted average:												
1922	2.01	1.88	1.91	1.93	1.89	1.93	2.08	2.30	2.30	2.30	2.65	2.74
1923	2.69	2.61	2.59	2.48	2.36	2.30	2.72	2.88	2.85	2.85	2.85	2.78

¹ Wisconsin State Department of Agriculture.

² Prior to December 1933, price same as for manufactured milk.

³ Purchases for this purpose began in December 1932.

TABLE I.—*Classified milk prices to dealers, Milwaukee, Wis., by months, 1922-39—*
Continued

[Dollars per 100 pounds]

Milk used for—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
E. All purpose weighted average—Continued.												
1924.....	2.695	2.685	2.46	2.28	2.23	2.19	2.265	2.445	2.405	2.155	2.285	2.245
1925.....	2.17	2.21	2.29	2.25	2.17	2.20	2.28	2.33	2.10	2.45	2.46	2.40
1926.....	2.41	2.38	2.37	2.45	2.43	2.38	2.455	2.595	2.747	2.785	2.78	2.73
1937.....	2.66	2.66	2.66	2.623	2.49	2.41	2.464	2.636	2.846	2.852	2.86	2.82
1928.....	2.74	2.63	2.71	2.57	2.55	2.49	2.62	2.80	2.78	2.84	2.85	2.78
1929.....	2.744	2.683	2.70	2.59	2.525	2.435	2.505	2.631	2.82	2.85	2.80	2.64
1930.....	2.53	2.46	2.49	2.43	2.30	2.11	2.25	2.38	2.41	2.40	2.28	2.13
1931.....	1.88	1.86	1.89	1.76	1.70	1.68	1.85	1.95	2.00	1.96	1.89	1.72
1932.....	1.55	1.51	1.52	1.43	1.27	1.25	1.23	1.23	1.23	1.23	1.23	1.27
1933.....	1.27	1.17	1.17	1.26	1.31	1.27	1.46	1.45	1.47	1.47	1.55	1.38
1934.....	1.47	1.50	1.49	1.43	1.44	1.42	1.40	1.59	1.68	1.76	1.73	1.74
1935.....	1.80	1.83	1.79	1.76	1.61	1.60	1.58	1.59	1.66	1.72	1.80	1.82
1936.....	1.83	1.88	1.78	1.73	1.61	1.64	1.83	2.10	2.17	2.15	2.23	2.28
1937.....	2.19	2.16	2.19	2.07	2.06	1.99	1.95	2.08	2.21	2.28	2.37	2.36
1938.....	2.26	2.14	2.14	2.03	1.93	1.85	1.76	1.82	1.89	1.91	1.96	1.97
1939.....	1.88	1.87	1.78	1.45	1.44	1.45	1.48	1.64	1.80	1.90	1.96	1.95

TABLE II.—*Monthly average retail price of fluid milk (house deliveries), Milwaukee, Wis., 1920-39¹*

[Cents per quart]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920.....	13	13	12	12	12	12	13	13	13	13	11	11
1921.....	10	10	10	10	9	9	9	10	9	9	9	9
1922.....	9	9	9	9	9	9	9	9	9	10	10	10
1923.....	10	10	10	10	10	10	10	11	11	11	11	11
1924.....	11	11	11	11	11	11	11	11	11	10-11	10	10
1925.....	10	10	10	10	10	10	10	10	10	10	10	10-11
1926.....	10	10	10	11	11	11	11	11	11	11	11	11
1927.....	11	11	11	11	11	11	11	11	11	11	11	11
1928.....	11	11	11	11	11	11	11	11	11	11	11	11
1929.....	11	11	11	11	11	11	11	11	11	12	12	12
1930.....	12	12	12	12	12	11	11	11	11	11	11	11
1931.....	10	10	10	10	10	10	10	10	10	10	10	9
1932.....	9	9	9	9	8	8	8	8	8	8	8	8
1933.....	7	8	8	8½	8	8	9	9	9	9	9	9
1934.....	9	9	9	9	9	9	9	9-10	10	10	10	10
1935.....	10	10	10	10	10	10	10	10	10	10	10	10
1936.....	10	10	10	10	10	10	10	11	12	12	12	12
1937.....	12	12	12	12	12	12	12	12	12	12	12	12
1938.....	12	12	12	12	12	12	12	12	12	12	12	12
1939.....	12	12	12	10	10	10	10	11	11	11	11	11

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.TABLE III.—*Daily average fluid milk consumption (including relief milk), Milwaukee Wis., by months, 1927-39¹*

[Thousand pounds]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1927.....	506	526	530	524	522	509	497	505	512	515	515	512
1928.....	519	524	529	516	525	513	500	508	517	517	524	507
1929.....	518	532	533	536	538	525	512	531	526	522	520	499
1930.....	512	520	522	518	510	499	475	482	503	501	500	484
1931.....	502	520	520	510	513	502	496	496	511	516	515	514
1932.....	528	541	540	546	541	527	487	487	500	510	507	497
1933.....	505	506	502	497	467	474	451	451	460	464	459	440
1934.....	465	475	484	485	491	482	473	474	478	488	494	474
1935.....	478	486	490	486	480	454	446	453	468	480	484	469
1936.....	475	480	486	493	486	479	463	448	456	467	463	465
1937.....	468	476	475	477	468	462	442	455	475	480	480	471
1938.....	472	478	484	476	459	451	425	436	451	464	464	461
1939.....	458	464	459	473	474	468	451	-----	-----	-----	-----	-----

¹ Wisconsin State Department of Agriculture.

TABLE IV.—*Daily average fluid milk consumption (excluding relief milk), Milwaukee, Wis., by months, 1929-39*¹

[Thousand pounds]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1929	518	532	532	535	538	524	511	531	526	521	519	498
1930	512	520	522	518	510	499	475	482	503	501	500	484
1931	489	502	495	483	488	478	470	462	479	479	465	419
1932	444	462	451	455	438	431	401	410	423	427	411	412
1933	415	408	405	410	400	399	389	404	418	427	419	407
1934	443	445	445	427	425	417	413	418	423	432	438	413
1935	408	413	420	420	421	404	396	404	414	421	422	426
1936	445	452	455	458	456	451	444	431	438	451	447	449
1937	451	457	459	460	453	448	430	441	461	465	464	453
1938	450	454	462	454	440	432	407	417	431	445	443	441
1939	434	436	434	446	448	439	426	430	440	443	447	441

¹ Wisconsin State Department of Agriculture.TABLE V.—*Index numbers of weekly pay rolls in manufacturing industries in the city of Milwaukee, Wis., August 1929-December 1939*¹

[Average 1925-27=100]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1929								107.6	104.4	108.3	102.2	92.9
1930	88.7	93.1	95.6	94.9	90.7	84.6	74.4	73.0	74.1	74.8	67.8	63.7
1931	59.6	62.5	66.1	67.7	66.5	64.3	58.3	57.0	52.3	48.6	50.4	50.0
1932	44.8	46.8	45.6	40.7	36.4	32.7	27.7	30.1	32.2	34.1	34.3	31.6
1933	30.2	30.3	27.7	34.8	38.7	45.8	47.7	52.0	51.8	53.4	51.5	51.7
1934	49.8	53.6	58.6	59.7	64.8	65.8	61.8	61.1	56.7	58.8	60.7	66.4
1935	67.7	73.4	75.2	78.5	77.2	76.3	77.9	77.5	82.6	82.7	84.5	86.7
1936	84.5	81.2	87.0	89.3	89.5	91.5	87.6	89.5	90.3	103.1	103.6	103.9
1937	104.6	108.2	118.1	123.0	120.5	123.7	118.8	118.6	117.7	121.8	113.9	100.2
1938	87.6	87.2	86.8	84.6	81.6	82.0	79.0	84.3	81.1	84.7	89.9	92.8
1939	88.8	95.4	97.0	94.7	92.8	96.5	92.4	98.1	96.4	103.4	109.4	110.6

¹ Published in monthly Survey of Current Business. Compiled by Statistical Department of Industrial Commission of Wisconsin (not adjusted to the U. S. Bureau of Census data or for seasonal variation).TABLE VI.—*Index numbers of annual average retail prices of fluid milk, evaporated milk, and of all food products, Milwaukee, Wis., 1923-39*¹

[1923-25=100]

Year	All food	Fresh milk	Evapo- rated milk	Year	All food	Fresh milk	Evapo- rated milk
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>		<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
1923	97.8	100.6	103	1932	70.4	79.6	70
1924	98.9	103.5	99	1933	68.3	81.5	67
1925	103.5	95.9	98	1934	75.2	90.1	68
1926	109.0	103.5	99	1935	81.7	95.9	70
1927	104.8	105.4	99	1936	84.9	103.5	75
1928	103.9	105.4	98	1937	89.4	115.0	77
1929	106.9	108.3	96	1938	82.8	115.0	74
1930	102.0	109.3	90	1939	79.3	104.5	71
1931	83.5	94.9	81				

¹ U. S. Department of Labor, Bureau of Labor Statistics Bulletins: Retail Food Prices.

TABLE VII.¹—Dealers' monthly average buying price for basic milk (3.5 percent) Milwaukee, Wis., 1920-39²[Cents per quart ³]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920.....	8.2	8.0	7.2	6.8	6.8	6.8	7.7	8.1	8.1	8.1	5.9	5.9
1921.....	4.9	4.9	4.9	4.8	4.1	4.1	4.1	5.6	4.3	4.7	4.7	4.7
1922.....	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.9	4.9	4.9	5.7	5.9
1923.....	5.9	5.8	5.8	5.7	5.6	5.6	6.5	6.5	6.5	6.5	6.5	6.5
1924.....	6.2	6.2	6.1	6.1	6.1	6.1	6.1	6.1	6.1	5.3	5.3	5.3
1925.....	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.6	5.4	5.4	5.4	5.6
1926.....	5.6	5.6	5.6	6.1	6.1	6.1	6.1	6.1	6.2	6.2	6.2	6.2
1927.....	6.2	6.2	6.2	6.2	6.2	6.1	6.1	6.2	6.5	6.5	6.5	6.5
1928.....	6.5	6.2	6.5	6.3	6.3	6.3	6.5	6.5	6.5	6.5	6.5	6.5
1929.....	6.5	6.2	6.3	6.2	6.2	6.2	6.3	6.3	6.7	6.8	6.8	6.8
1930.....	6.8	6.7	6.7	6.7	6.7	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1931.....	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	4.7
1932.....	4.5	4.5	4.5	4.5	3.7 ¹	3.7	3.8	3.8	3.8	3.8	3.8	3.4
1933.....	3.4	3.4	3.5	3.8	3.8	3.8	4.3	4.3	4.3	4.3	4.3	4.3
1934.....	4.3	4.3	4.1	4.1	4.0	4.0	4.0	4.5	4.9	4.9	4.6	4.6
1935.....	4.6	4.6	4.6	4.5	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1936.....	4.4	4.4	4.4	4.4	4.3	4.3	5.1	5.8	6.0	6.0	6.0	6.0
1937.....	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1938.....	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1939.....	5.8	5.8	5.8	4.5	4.5	4.5	4.5	5.2	5.2	5.2	5.2	5.2

¹ Computed from hundredweight prices obtained from Wisconsin State Department of Agriculture except data for 1920 and 1921 from prices published in Fluid Milk Market Reports of Bureau of Agricultural Economics, U. S. Department of Agriculture.

² See table VIII for retail price of fluid milk (house deliveries).

³ Hundredweight price divided by 46.5.

CHAPTER VI ¹

GOVERNMENTAL CONTROL OF MILK PRICES IN NEW YORK STATE

In New York State, as in many other areas in the United States, the governing body has in recent years attempted to regulate certain phases of the purchase and distribution of fluid milk and cream. The reason for this action lies in the economic distress of farmers and in the vital importance of the dairy industry to the people of the State.

Milk prices are of tremendous importance in determining the prosperity of farmers and of many rural communities in New York State. Dairying is the major agricultural enterprise, normally accounting for approximately one-half of the farm income. Seventy-five percent of the milk sold from farms in this State was utilized as fluid milk and cream in 1936. The remaining 25 percent, mostly surplus from fluid milk markets, was used for the manufacture of such products as cheese, butter, ice cream, and evaporated milk.² On the consumers' side the importance of milk as a food product, and as a sizable item in the family budget, is generally recognized. Recent public regulation of milk prices has, however, been promoted by farmers and distributors rather than by groups interested chiefly in direct protection of the consumer.

When the following conditions are observed it is not at all surprising that there developed a strong interest in governmental control of milk prices. The farm price of milk dropped approximately 60 percent in New York State from 1929 to 1932. This decline was much more precipitous than the drop in prices of most things farmers buy. It was also more pronounced than the drop in an index of 30 basic commodities at wholesale for the same period. Farm milk prices in this State were as much as 30 to 40 percent higher than this index from 1926 to 1931 (using 1910 to 1914 as a base period). By early 1933 the milk prices had dropped below the average of the 30 commodities, but they recovered sharply with the instigation of milk control. From 1933 to 1938 milk prices in this State fluctuated irregularly compared with the index of these other prices.³

The main market for milk producers in New York State is of course the New York metropolitan area. Other important markets such as Buffalo, Syracuse, and Rochester are known as up-State markets. Their main supply of milk comes from nearby producers located within the State.

In 1930 the New York metropolitan area had a population of over 10,000,000 people, 78 percent of whom were located in New York

¹ This chapter was written by Mr. R. K. Froker. Helpful information and suggestions were received from Dr. R. L. Gillett, New York State agricultural statistician, from Director Kenneth F. Fee, and his associates of the State milk control division and from Dr. M. C. Bond and Dr. Leland Spencer of Cornell University. Grateful acknowledgment is also made to H. Ralph Hitchner, graduate assistant, University of Wisconsin for valuable aid in preparation of this report.

² Agricultural Statistician, New York Department of Agriculture and Markets.

³ Bond, M. C., *The Milk Marketing Situation in New York*, (mimeographed) Cornell University, March 1938, 7 pp.

State and the remaining 22 percent in New Jersey. The people in this market area consume approximately 8,500,000 pounds of milk daily as fluid milk, plus half again as much in the form of cream. The fluid milk supply is obtained from an area that extends 500 miles to the west and north. The production area includes primarily the State of New York and parts of New Jersey, Pennsylvania, and Vermont. Small amounts of milk come from other States and at times some from the Provinces of Ontario and Quebec. In 1938 about 67 percent of the rail and truck receipts of milk in the New York metropolitan area originated in New York State, 15 percent in Pennsylvania, 12 percent in New Jersey, 4 percent in Vermont, and the remainder in other areas.

One of the basic features of fluid milk marketing in New York State is this interstate character of the main market. This, as we shall see, has had an important bearing upon the operations of the State milk control laws and upon their course of development.

HISTORICAL DEVELOPMENT

Wicks Report.

The State's interest in the economic phases of dairy marketing goes back nearly a quarter of a century. A joint legislative committee was appointed in 1916 to study alleged combinations and monopoly of dealers and manipulations of prices of dairy products, poultry, and livestock. The findings of this committee, which was headed by Senator Charles W. Wicks, became known as the Wicks report.⁴ While no legislation on control of price or supply resulted from this study it was, nevertheless, a forerunner to the development of more comprehensive market information than had previously been available.

About this same time the New York Legislature passed a law requiring the purchasers of milk to furnish a bond to the State to assure full and proper payments to farmers for milk. This measure has remained on the statute books ever since and is believed to have been helpful in protecting payments to farmers.

Pitcher Report.

The dairy situation in New York State was again made the subject of investigation by a joint legislative committee in March 1932. This committee was charged with the duty of investigating the causes of the decline in the price of milk to producers, the resultant effect on the industry, and the future supply of milk. It was also instructed to study the cost of distributing milk and the relationship of such cost to prices paid to producers. The entire investigation was to be made "to the end that the consumer may be assured of an adequate supply of milk at a reasonable price both to producer and consumer."

The committee presented its findings and recommendations in a 473 page printed report which became known as the Pitcher report.⁵ The findings and recommendations of this committee were the fore-

⁴ Preliminary Report of the Joint Legislative Committee on Dairy Products, Livestock, and Poultry, State of New York, S. Doc. 35, February 15, 1917. A number of economic studies of milk marketing were made during subsequent years by the New York State Agricultural Experiment Station, Cornell University, Ithaca, N. Y. The reports of these studies include bulletins 445, 459, 473, 486, 518, and 527. In addition, the experiment station has issued large amounts of mimeographed material dealing with milk marketing.

⁵ New York State Legislative Document (1933) No. 114, Report of the Joint Legislative Committee to Investigate the Milk Industry. The committee was headed by Hon. Perley A. Pitcher, chairman. Dr. Leland Spencer served as research director and editor.

runner of present day milk control in New York State and as such deserves brief discussion here.

The committee concluded that the financial situation of farmers in the State was desperate, and that the principal causes of extremely low prices to producers were (1) an unprecedented decline in the general level of prices; (2) a periodic increase in the number of cows and in milk production; (3) unfair and destructive trade practices in the distribution of milk; and (4) failure of transportation and distribution charges to be reduced in proportion to the reduction in retail prices of milk and cream.⁶ Of even more importance here is the further conclusion that "the fluid milk industry is affected by factors of instability peculiar to itself which call for special methods of control."⁷

To "mitigate the evil of price-cutting" three suggestions were made: (1) universal application of the classified price plan with uniform prices to all milk dealers; (2) fixing of minimum resale prices; and (3) the imposition of a graduated tax on milk dealers according to the percentage of their entire supply disposed of as fluid milk and cream.⁸ The graduated tax was intended not only to aid in eliminating price-cutting, but also to equalize the burden of surplus milk among dealers and producers. No mention was made as to what use should be made of the proceeds from this tax or as to what agency should levy it.

As an emergency measure the committee advised that "a temporary milk control board be created with broad powers to regulate and stabilize the milk industry as well as may be done under the circumstances."⁹ The implication seems clear that such action was intended as a temporary measure and that only partial success was anticipated.

For permanent stability of the dairy industry the committee believed that universal application should be made of the classified price plan and that surplus milk should be controlled by the producers through effective cooperative organization. This was to be done through a federation of existing cooperatives or by one large centralized organization.¹⁰ While cooperative organization was given as the way to obtain stability, it was at the same time claimed "that the dairy industry of the State cannot be placed upon a profitable basis without a decided rise in the general level of commodity prices."¹¹

Still other recommendations included (1) licensing milk dealers and requiring regular reports from them; (2) securing a drastic reduction in basic freight rates on milk and cream; (3) enlarging appropriations for completion of the program of bovine tuberculosis eradication; (4) extending research and education; and (5) coordinating interstate laws, rules, and regulations in the New York milkshed. The committee sponsored three legislative bills. The most important one from the standpoint of this report is described in the next section.

The 1933 Law.

The first legislation for the control of milk prices in New York State was enacted in April 1933. Its passage was the direct outcome of the Pitcher report and efforts of the Joint Legislative Committee. The bill also had the backing of several farm organizations and of some milk distributors.

⁶ Ibid. pp. 14-15.

⁷ Ibid. p. 15.

⁸ Ibid., p. 17.

⁹ Ibid. p. 18.

¹⁰ Ibid., p. 17.

¹¹ Ibid., p. 19.

Under this act a milk control board was created and given broad powers to supervise and regulate the entire milk industry of the State.¹² The board was to consist of the Commissioner of Agriculture and Markets, the Commissioner of Health and a director who was to be appointed by the Governor. The board was to function as a part of the State Department of Agriculture and Markets.

Specific powers granted the board include the following:

1. Power to investigate all matters pertaining to the dairy industry as the emergency requires.
2. Power to subpoena.
3. Right of entry and inspection.
4. Right to act as mediator and arbitrator.
5. Authority to institute legal action against violators.
6. Licensing of milk dealers including right of suspension and revocation.
7. Requiring milk dealers to keep certain records and make reports.
8. Fixing of minimum and maximum prices to be charged by dealers at resale, i. e., at wholesale and retail.
9. Classification of milk and fixing of minimum buying prices to dealers.

Of particular interest is the right to fix both minimum and maximum resale prices, although in practice only minimum prices were fixed. Sterilized milk and sales upon bids to the State, municipality, and Federal Government were exempt from the act. Any dealer handling only unadvertised milk in a city of over one million inhabitants was permitted to sell fluid milk in bottles through stores at 1 cent discount under advertised brands. This provision received wide publicity and it caused no small amount of administrative and legal difficulty since it tended to reduce the sales of milk under nationally advertised brands.¹³ Of further interest is the authority granted the board to act as mediator and arbitrator in milk disputes among producers and among dealers, or between these groups.

Immediately upon passage of the act the board was faced with the problem of severe price competition among distributors in several of the larger markets. Apparently some distributors were seeking to enlarge their sales in anticipation of State orders which would fix the resale price of milk and thus protect their expanded operations. Producers were also extremely dissatisfied with the low prices they were receiving. In an effort to cope with the first of these problems, the board established minimum prices to be charged for milk and cream by distributors to consumers, by distributors to stores, by stores to consumers, by distributors to other agencies, and by distributors to other distributors. To cope with the second problem, the board adopted a classified price plan as a basis for establishing minimum prices to producers.

The first serious opposition encountered by the Milk Control Board in the new program came from a group of producers selling milk to the New York metropolitan area. A drought during the latter part of June, July, and August impaired pastures and reduced milk production. On July 24, a group of producers headed by the Dairy

¹² "Including the production, transportation, manufacture, storage, distribution, delivery and sale of milk and milk products in the State" article 25, sec. 303, laws of 1933.

¹³ The Borden Co. stated that it suffered a loss in sales of not less than 25,000 quarts of milk daily. *Borden's Farm Products Co., Inc. v. Baldwin, et al.*, 293 U. S. 194 (1934).

Farmers Union (a producers' cooperative association in New York State), demanded that the classified price plan be abolished and that a flat rate of 45 percent of prices charged by dealers to consumers be paid for all milk produced. The board held hearings on the prices paid producers but made no change in its classified price plan. Its refusal to accept the proposed scheme resulted in a milk strike in certain areas in the State which lasted from August 1 to August 15.

Other difficulties encountered came from the complex nature of the New York metropolitan market. Certain dealers purchased milk from other States at prices below the minimum established by the board. Evidence was also found which indicated that in some instances the board's price orders were evaded within the State by secret rebates and elaborate schemes for falsifying records. The board also encountered numerous jurisdictional disputes since its authority had not been tested in the courts. In fact, this legal friction continued to be a serious hurdle and definitely hampered effective administration, at least until the summer of 1939.¹⁴

The 1934 Law.

Just prior to the termination of the first milk control law a revised law was adopted and made effective April 1, 1934. The price-regulating features of this law were to last for a period of 1 year. They were, however, extended in 1935 and again in 1936 with only minor changes.

The principal change in the 1934 law was in administration. Another change of interest was the provision authorizing the establishment of production quotas to individual producers or classes of producers providing such quotas were made applicable, pursuant to Federal or State statutes, throughout all the States comprising the New York milkshed. However, this provision was never used. Market-wide pooling was also authorized for the first time in this State by the 1934 law.

Under the new law, a separate division of milk control was created within the State Department of Agriculture and Markets. Powers formerly granted to the Milk Control Board were now placed with the commissioner of this department. It was further provided that there should be in the division a milk advisory committee of from 11 to 15 members, a number of whom should be named from nominees of specific producer and dealer organizations in the State.

The Division of Milk Control was given the task of administering the provisions of the statute that dealt with the licensing and bonding of milk purchasers which had been in effect for several years, as well as the price-fixing features of the 1934 milk control law. It was felt that the centering of these activities in one division would eliminate some duplication and give a stronger and more unified administrative organization to cope with the many problems encountered in attempting to control the milk industry. The personnel of this division was made up of the staff of the former Milk Control Board combined with part of the staff of the former Dairy and Food Bureau of the Department

¹⁴ Among the issues to be tested in court were: (1) The fixing of retail milk prices by the State; (2) right to investigate the business of a dealer; (3) revocation of a dealer's license under certain conditions; (4) fixing of minimum prices to producers; (5) classification of milk; (6) fixing of prices at certain levels; (7) fixing of differentials between "advertised" and "unadvertised" milk; (8) limitations of "intra" and "inter" state commerce as applied to milk; and (9) procedure, judgment and delegation of power in the administration of the act. For a listing of the earlier cases and points considered under the New York milk control law see appendix A, Report of Division of Milk Control for Year 1934, New York Department of Agriculture and Markets.

of Agriculture and Markets. These combined forces were divided roughly into three sections as follows: one responsible for auditing made necessary by price control activities; another responsible for licensing activities; and the remaining section responsible for general inspection and enforcement.

The general plan of price control which was instituted during 1933 was continued by the new division until 1937. During this period a certain amount of opposition from dealers was encountered in the form of evasion of official orders. There was also dissatisfaction among certain producer groups because of the differences in prices. These difficulties had already begun in 1933, but were accentuated as the law was extended. Some producers were fortunate enough to get the major part of their product in class I, whereas other producers received lower prices because all or a large part of their milk fell into classes where prices were considerably lower than the class I price. Sales were not pooled on a market basis. In some cases, producers formed cooperatives in order to evade the milk orders by giving rebates to dealers. The problem of out-of-State sales and out-of-State purchases was also ever present.

Rogers-Allen Law.

On April 1, 1937, the milk price control features of the State laws were permitted to lapse. However, a new law commonly known as the Rogers-Allen law became effective on May 18, 1937. The unique features of this legislation are the provisions for the establishment of bargaining agencies of producers and of distributors. This act authorized incorporated cooperative associations of producers in the production area of a market to join together and form a producers' bargaining agency. It also permitted distributors to form a distributors' bargaining agency in any marketing area.

The voting power in a producers' bargaining agency was made proportionate to the number of producers under contract in the respective member associations and approved by the board of health to sell milk for consumption in the market. In the distributors' bargaining agency voting is in proportion to volume of milk distributed in the marketing area by the respective member distributors in the form of milk or cream.

The purposes of a producers' bargaining agency are briefly as follows:

- (1) To negotiate agreements or the basis of orders for presentation to the commissioner for his consideration and approval.
- (2) To appear before and negotiate with the commissioner in regard to marketing agreements or orders.
- (3) To serve as a common marketing agency for member associations.

The first two purposes are also granted to a distributors' bargaining agency. The third is not. Producers' and distributors' agencies have the right "to meet and negotiate in order to carry out the purposes of the act and subject to the approval of the commissioner." It is also lawful for a producers' bargaining agency and a distributors' bargaining agency operating in a given market to enter into marketing agreements as to prices to be paid by distributors to producers for milk sold or otherwise utilized in the area. Such agreement may cover conditions affecting such sales and payments, including reasonable trade practices affecting the relations between producers and dis-

tributors. The agreement is effective only upon the signing of all persons who are parties thereto and upon filing a copy of the agreement with the commissioner, who, in turn, may serve a complaint on the parties if he believes the agreement results in monopoly, or restraint of trade, to such an extent that the price of milk is unduly enhanced by reason thereof.

Upon the recommendation of a producers' bargaining agency, representing not less than 35 percent of the producers in an area, the Commissioner of Agriculture and Markets may hold a hearing and promulgate an order fixing prices to producers on a market-wide basis. Its issuance depends on the findings of the Commissioner and upon a favorable vote of 75 percent of the producers.

If both the producers' and distributors' bargaining agencies request the Commissioner¹⁵ he may hold a hearing to consider the advisability of making effective as an order for the whole market any appropriate marketing agreement made between the two agencies. Such an agreement may include producers' prices, production quotas and terms and conditions of sale. No provision is made in the Rogers-Allen law for the fixing of resale prices at either wholesale or retail, apparently because there was much opposition to resale price fixing among consumers and handlers.

The bargaining agencies formed under the Rogers-Allen law have agreed on prices to producers on several occasions. It was not until September 1, 1938, that a State order was issued under this act. The order was for the regulation of prices in the New York metropolitan area,¹⁶ and was issued concurrently with and was complementary to a similar order made effective by the Secretary of Agriculture of the United States.¹⁷ Under the provisions of these Federal-State orders a classified price plan and a pooling plan were put into operation. Producers receive a blended price for all milk sold to handlers in the area irrespective of the use to which the milk from any one or any group of producers is put. Differentials are, of course, made in the blended price to producers to adjust for the location of the plant and the butterfat content of the milk. Premiums over and above the blended price are provided for grade A milk. These vary with bacteria count and with the test of milk.

The combination of Federal and State orders eliminated some of the problems encountered under the earlier State control legislation, but the new arrangement was soon to face enforcement difficulties. The Federal order covering the New York metropolitan area was suspended as of February 1, 1939, pending judicial decisions involving its validity. The Federal order was reinstated on July 1, 1939, shortly after the United States Supreme Court had upheld the order.¹⁸ Although the State order was not withdrawn during the period, no attempt was made to enforce compliance.

The Rogers-Allen law was amended at several points in the spring of 1939 by the "Nunan-Allen" law. This legislation broadened the provisions for the equalization of market proceeds among producers and authorized payments to milk dealers and cooperative associations for services during periods of surplus or of shortage of milk.

¹⁵ Ch. 126, Laws of 1934, art. 21, sec. 258-M, par. 5.

¹⁶ New York City, and the counties of Nassau, Suffolk, and Westchester, all in the State of New York.

¹⁷ Order No. 27 issued under authority of the Agricultural Marketing Agreement Act of 1937.

¹⁸ *U. S. v. Rock Royal Co-Operative Inc., et al.*, 307 U. S. 533 (1939).

Milk Strike and "La Guardia" Agreement.

Still another disturbing element in the troublesome New York market was the calling of a milk strike by the Dairy Farmers' Union in August 1939. The strike began on August 15 and lasted until August 23. At its height about 40 percent of the normal supply of milk was reported to have been withheld from the market. The Dairy Farmers' Union was known to be opposed to governmental price-fixing, and particularly to the classified system of pricing. This association and the strike leaders demanded a flat price of \$2.35 per hundredweight for all milk and several changes in the Federal and State orders for the metropolitan area.

A conference was called by Mayor La Guardia of New York City for August 21. After a 2-day session distributors agreed to raise the prices for the main classes of milk by 15 to 40 cents per hundredweight, but the blended price was still under \$2.15 and considerably short of the flat price demanded by the strikers. The agreement was to last until October 31 unless superseded by higher prices under Federal and State orders for this market.

At the time of the strike, arrangements were already under way for amendments to the Federal and State orders to increase the price of milk. Joint hearings on Federal and State orders were held August 24 at Syracuse and August 25 at New York City. Amendments to the orders were made effective October 1, 1939. The class I price (fluid milk) was increased to \$2.82 effective until May 1, 1940. This price was 22 cents above the LaGuardia agreement price. Classes II-A, II-B, and III-B were increased 15 to 20 cents each and in line with the LaGuardia agreement.¹⁹ No other important changes were made in the orders by these amendments. The increases in price were granted because of an alleged emergency due to a severe summer and autumn drought over much of the production area.

EXTENT OF STATE CONTROL

Governmental control of milk prices in New York State in September 1939 was confined to the Niagara frontier area (Buffalo) and that part of the New York metropolitan area lying within the State of New York. The New York market was under joint control of Federal and State orders. The Buffalo market was under State control only. These orders deal only with the purchase of milk from farmers and with the distribution of market proceeds among farmers. The orders do not specify resale prices. State control over a few other markets was in various stages of development from the formation of producer bargaining agencies and distributor bargaining agencies under the Rogers-Allen law to the actual application for State orders.

It is to be remembered in this connection that for a time under earlier control laws the production and distribution of milk throughout the State was placed under State control.

DECLARATION OF FINDINGS AND POLICY

In extending the regulatory power of the State in 1933 to the field of control of milk prices, the legislature made the following declaration of findings and policy:²⁰

¹⁹ For definition of classes and formulas for determining the respective prices, see pp. 25 and 26.

²⁰ Sen. 300, art. 25, ch. 158 of the Laws of 1933.

1. "This article (25) is enacted in the exercise of the police power of the State and its purposes generally are to protect the public health and public welfare."

2. "* * * unhealthful, unfair, unjust, destructive, demoralizing, and uneconomic trade practices have been and are now carried on in the production, sale, and distribution of milk." These conditions were declared to "constitute a menace to the health, welfare, and reasonable comfort of the inhabitants of the State."

3. "In order to protect the well-being of our citizens and promote the public welfare, and in order to preserve the strength and vigor of the race," the milk industry in the State was declared "to be a business affecting the public health and interest."

4. "* * * the production and distribution of milk is a paramount industry upon which the prosperity of the State in large measure depends."

5. The disparity between the prices of milk and of other commodities was looked upon as having "largely destroyed the purchasing power of milk producers for industrial products, broken down the orderly production and marketing of milk, and seriously impaired the agricultural assets supporting the credit structure of the State and its local governmental subdivisions."

In its declarations the legislature not only recognized the serious economic condition of many farmers, but also made a bid for city and public support for the control legislation which was to follow. The danger to the public welfare was declared to be "immediate and impending" and the need for public supervision and control to be "urgent."

When the 1934 law was passed and when it was extended in 1935 and 1936, the legislative body declared that an emergency still existed. However, by 1937 the emergency character of the statement of findings had disappeared and the Rogers-Allen law was looked upon as permanent control legislation.

ADMINISTRATION ²¹

There have been three stages of development in the administration of milk price control legislation in New York State. The 1933 law was administered by a State Milk Control Board made up of the Commissioner of Agriculture and Markets and the Commissioner of Department of Health. A third member was appointed by the Governor and also made director.

In 1934 this set-up was abolished and a division of milk control was established within the department of agriculture and markets. This division was charged with the administration of the emergency milk control law and, in addition, with the administration of other dairy laws of State such as standards for milk and milk products, licensing of plant managers and testers, and the bonding of milk dealers.

Since the enactment of the Rogers-Allen law in 1938 two other changes have taken place in the administration. One is in the functions delegated to producers' and distributors' bargaining agencies for the development of conditions preliminary to the issuance of orders. The other change is that the actual administration of orders for specific market areas is carried on largely through the medium of local market administrators who are appointed by the Commissioner of the Department of Agriculture and Markets. The administrator of the State

²¹ See also section on "Historical Development," pp. 199-201.

order for the New York market was given the following powers in the order for that area.²²

1. To administer the terms and provisions of the order.
2. To receive, investigate, and report to the Commissioner complaints of violations of the order.

These conform to powers granted the market administrator under the Federal order for this market. In fact, the Federal and State agencies have appointed the same person to serve under both orders. In addition to the duties prescribed in the State order for the market administrator, he is required to comply with rules and regulations designed to assure faithful performance of his duties.

Throughout the period of State price control the Department of Agriculture and Markets has been closely identified with the administration of this legislation and Kenneth F. Fee of the Department has served as director. This has given a degree of uniformity to policies and practices in the administration that probably would not have prevailed with a changing personnel.

STANDARDS OF OPERATION

Legislative Standards.

The State legislature in passing milk price control legislation set forth a few broad standards for the guidance of the administrative body and others. These standards provide that ²³—

1. Prices shall be reasonable when compared with costs and charges for producing, hauling, handling, processing and/or other services performed in respect to milk.
2. Prices when established for milk in the several localities and markets of the State, and under varying conditions are to be at a level that will best protect the milk industry.
3. Prices shall tend to insure a sufficient quantity of pure and wholesome milk to adults and minors in the State.
4. Prices shall be at a level which will be most in the public interest.
5. The Commissioner shall take into consideration (a) "the balance between production and consumption of milk"; (b) "the costs of production and distribution"; (c) "and the purchasing power of the public."

These concepts and instructions are necessarily subject to differences in judgment when applied to specific cases. It appears that they have been looked upon as general guides by the administrative body rather than standards requiring careful interpretation and use.

The legislature set forth two standards for guidance in establishing resale prices. The first was stated as the intent of the legislature that the benefits of any increase of prices to dealers by virtue of the minimum price provisions of the act should go to producers.²⁴ The second of these provided that "a minimum wholesale or retail price to be charged shall not be fixed higher than is necessary to cover the costs of the ordinarily efficient and economic milk dealers, including a reasonable return upon necessary investment."²⁵ The first of these was included in the 1933 law, but not thereafter, while the latter first appeared in the 1934 law. The general distribution margin (retail price less class I price) was relatively narrow during the period of retail-price fixing as compared with the margin existing prior thereto.

²² Official Order 126, art. 2, sec. 3, issued by the New York State Department of Agriculture and Markets.

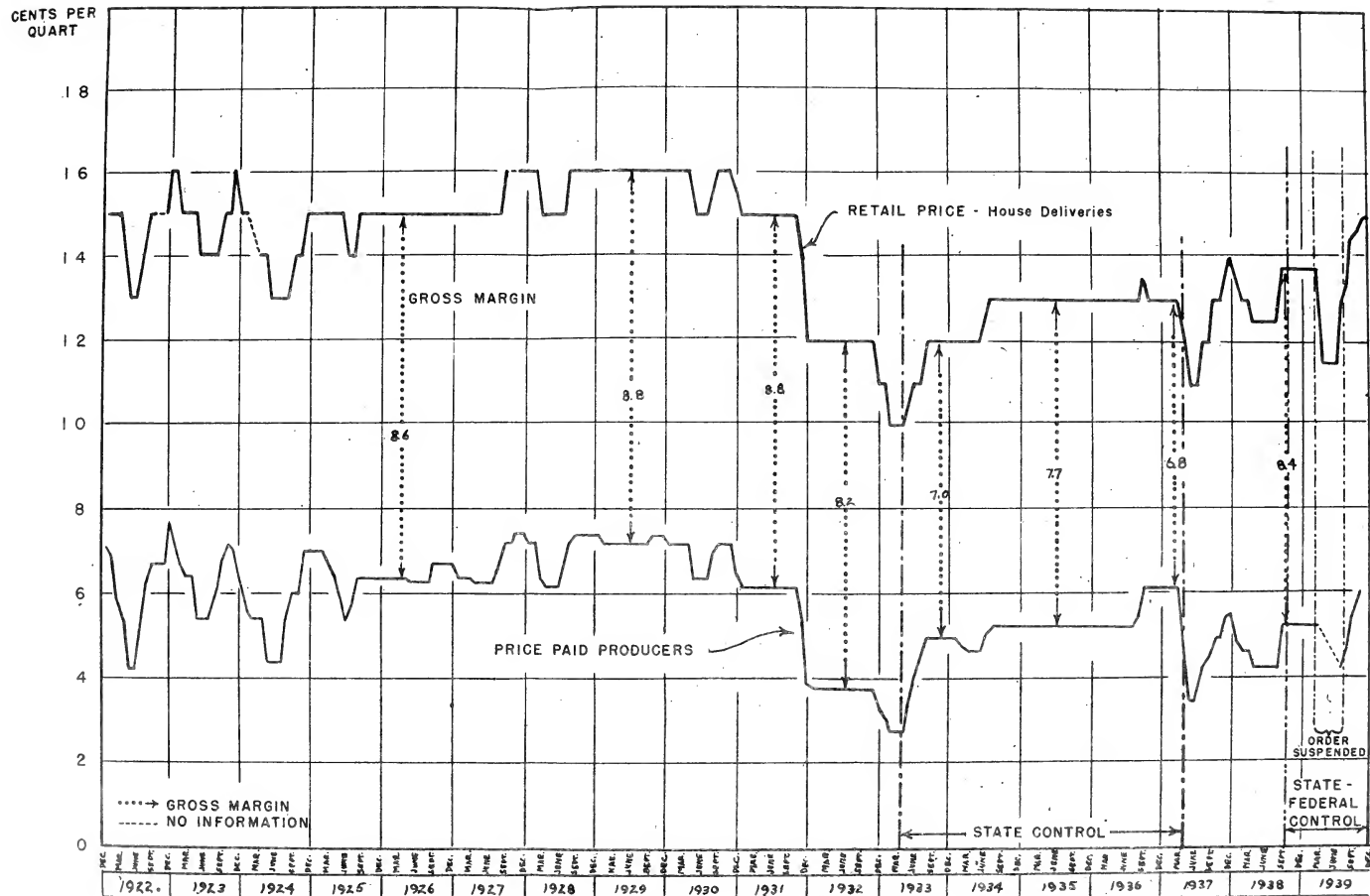
²³ Ch. 126, art. 21-A, sec. 258-m of the Laws of 1934. Legal standards were essentially the same in milk control laws of other years.

²⁴ Art. 25, sec. 312, par. (c) of the Laws of 1933.

²⁵ Art. 21-A, sec. 258-m, par. (b) of the Laws of 1934.

CHART XII

Fluid Milk Prices in New York City, 1922-39



(See chart XII.) Beyond this it is not clear how precisely these standards were interpreted or followed.

It was required in all instances that public hearings should be held at which any one could present information and arguments for or against an order or amendment before it was made effective. This requirement is not only a method of procedure, but tends to serve as a standard as well. The 1934 law provided for the establishment of a milk advisory committee to be made up of representatives of the main organized groups and others. The law required the Commissioner to confer with this committee on proposed changes and no order should be issued without an affirmative vote of a majority thereof.

The Rogers-Allen law contains essentially the same general standards of the earlier milk control laws, and is more explicit in the procedure that shall be followed in developing an order. This procedure involves certain standards. The initial action for an order under this law must come in the form of a petition from a producers' bargaining agency representing not less than 35 percent of the producers in an area or in the form of a request from both the producers' agency and the distributors' agency asking that an agreement already made between the two groups shall be extended into an order for the whole market. Any such request or petition must allege the existence of conditions necessitating regulation in the public interest and must be necessary to the orderly marketing of milk.

The Commissioner is required by law to hold a public hearing and if he finds the alleged conditions to exist he may issue a price-fixing order upon the approval of 75 percent of the producers supplying milk to the market. Before extending a marketing agreement into an order the Commissioner must find that the terms and conditions of the agreement are fair, equitable, and in the public interest, and that the agreement was fairly entered into without fraud.

Administrative Standards.

In practice, the administrators of the control laws in New York State appear to have been guided not only by the broad legislative standards, but also by information gathered at hearings, information supplied by interested persons or groups, by custom, by costs, and by the wishes of interested parties, particularly producers.

Consideration of the welfare of producers supplying milk to particular markets seems to have been a major consideration. This has been exemplified in the level at which the prices have been set from time to time in other ways. For example, poor pastures and local feed conditions were given as cause for rise in the price of class I milk in July 1933. Similarly, drought conditions and increased cost of producing milk were advanced as reasons for increases in the price of milk in the fall of 1936 and again in 1939. When railroad rates were reduced in July 1933 by the equivalent of 7½ cents per hundredweight of milk from the 200-210 mile zone, the board ruled that this saving in transportation costs should go to producers. Transportation allowances to dealers were, however, already liberal since they were based upon less than carload lot rail rates and much of the milk was transported in carlots and in tank trucks, no doubt at lower cost.

Competitive conditions were, of course, the principal standard used in determining prices for milk used for products such as butter

cheese, and evaporated milk. Distributors had to sell these products in competition with similar products from other areas. The cost of receiving and manufacturing milk into these products was a necessary corollary for consideration in determining prices to producers.

Distribution costs came in for much discussion during the period in which resale prices were established by order. Just how much weight was given to this standard is not easily determined. However, it was recorded²⁶ that increased costs of supplies in the summer of 1933 and an anticipated wage increase under the N. R. A. program were presented as necessitating a rise in distributors' margins. On July 21 the board increased the resale price of milk by an amount equivalent to about 47 cents per hundredweight (1 cent per quart or 46.5 cents per hundredweight). The board allowed distributors 12 cents of this increase, the other 35 cents went to producers.

In determining the number of classes into which milk should be divided the board was faced with many possible standards.²⁷ From the standpoint of ease of accounting the fewest possible number of classes is obviously desirable. From the standpoint of the greatest possible return to producers it is probable that one class of milk for each use would be preferable to almost any other number. This naturally would permit maximum adaptation to the competitive conditions and to the elasticity of demand in pricing the milk. Legislative standards did not establish the basis for determining the number of classes or for determining the price for any particular class of milk. The board appears to have been guided to a considerable extent by the practices in the market, in the metropolitan area especially by the sales practices of the Dairymen's League Cooperative Association, Inc. This association, with a membership of 35,000 farmers, is the largest producers' milk marketing agency in New York State. It is not only a large operator of country plants and a bargaining agency, but it is also a large distributor of milk and cream.

It is, of course, possible to classify milk in other ways for pricing purposes. The place in which a product is sold may be a basis for classification as well as the form in which it is sold. This method was followed to some degree in the orders for the New York market. Milk sold in fluid form was called class I milk if it was sold in the metropolitan area, but was unpriced when sold outside this area. Milk used in the manufacture of ice cream was placed in one class if sold in New York City and another if the ice cream was sold outside this area. The same practice prevailed with respect to fluid cream sales outside of the sales and production areas.

The explanation usually given in justification of these double standards of classification is that other markets do not have as rigid quality requirements and that competitive conditions necessitate a lower scale of prices if sales are to be made in these markets. On the other hand, this type of pricing is sometimes looked upon as a form of "dumping" since the same grade and form of product is accounted for by the same company at lower prices when sold in outside markets than when sold in the controlled area. Moreover, the Federal-State orders for the metropolitan area take no account of the varying conditions which may exist with respect to quality or price among these

²⁶ Report of Milk Control Board 1933, p. 5.

²⁷ The first and second of these are presented in the Annual Report of the Division of Milk Control for the year 1936, p. 13.

"outside" markets. The presence of unpriced milk among handlers operating under these orders makes for cumbersome administration. Difficulties arise because it is impossible to enforce the payment of specific prices to producers unless such prices cover all milk handled or unless the unpriced milk is purchased and handled entirely separately from that which is regulated.

In determining transportation allowances to distributors shipping milk and cream to the metropolitan area two sets of standards have apparently been used. Earlier allowances for class I milk (1933-34) were based on less than carload lot rates of 40-quart cans, while these allowances under the Federal-State orders in 1938-39 were based on carlot rates. It is not clear to what extent the transportation allowances for different classes of milk represent the actual costs to distributors under either of these standards. In the case of fluid milk (class I) it is known that from 1933 on over a third of the total has been transported in tank trucks rather than by rail, and very likely at lower costs.

In establishing differentials in payments for milk to producers the class I differentials (freight allowances for class I milk) were applied to all milk. This is in line with the custom in the market prior to State control.

Payments of from 1 to 5 cents per hundredweight of milk are made to certain cooperative associations out of the producer settlement fund under the Federal-State orders for the metropolitan area. Likewise, market service payments are made from this fund to handlers under certain conditions when milk is diverted from fluid milk to manufacturing channels, and also when milk ordinarily used for manufacturing purposes is diverted into fluid milk. Payments from the producer settlement fund for either of these purposes has no precedent in other State or Federal orders. It has, however, since been used in the State order for the Niagara frontier market (Buffalo) and is permitted under the recently enacted Nunan-Allen law in New York State. The market service claims were the equivalent of 5 to 11 cents per hundredweight on all milk coming under the Federal-State orders from the metropolitan area. On that milk for which these payments were made it has averaged about 33 cents per hundredweight. These payments are deductions from the specified prices which handlers are obligated to pay. Consequently they are also deductions from total payments to producers.

In the earlier orders market proceeds were distributed among producers on a distributor pool basis. Producers delivering to each distributor received a blended price which was determined by the receipts and uses of milk of that particular distributor. In the case of cooperative associations producers were paid a blended price based on all receipts and sales of the cooperative. The control law permitted pooling to the extent that it was found to be practicable in its application.

In the orders for the metropolitan area, and for the Niagara frontier area (Buffalo) which was issued in 1938 and continued in 1939, producers were paid on a market-wide pool basis. In this way each producer received a blended price for his milk based on the total receipts and uses of milk for the entire market.

The standard used in issuing or denying permits to new producers seems to have been one based on the supply of milk in the market.

If additional supplies were needed for fluid milk purposes, new producers were admitted—otherwise permits were denied. Actually the department of health issued the permits, but before issuing any to new producers it was required in practice, and first authorized by the State act of 1935 to prove to the commissioner that there was a need for such milk.²⁸ The volume of milk on the market was a condition for denying permits to new producers even in the autumn of 1939, but it did not keep the commissioner from raising the price due to drought and to the demand of producers already on the market.

Licenses to persons wishing to engage in the distribution of milk have been denied in a number of instances on the basis that more distributors would duplicate facilities for the processing and distributing of milk and thus tend to increase distribution costs and margins.²⁹ For example, during 1934 there were 55 hearings given to prospective new distributors on their applications for licenses. Forty-one of these applications were denied outright and licenses were issued to the remaining 14 cases. Most of these newly granted licenses were issued to persons taking over the business of some established dealer who at the same time was retiring from the field.³⁰ The granting of these new licenses was therefore looked upon as not increasing the number of distributors and not adding to the duplication in the distribution of milk.

CONTROL DEVICES

Price control of milk was adopted as a means of accomplishing the broad objectives of the milk control laws discussed earlier in this report. In order to control prices to these ends, it was necessary to utilize some of the control devices permitted by the acts, Federal and State. The most important of these, as used in New York State, are described briefly in this section.

Public Hearings.

Public hearings have been used throughout the entire control program as a means of securing pertinent information as well as for the purpose of permitting interested parties an opportunity to be heard. These hearings have enabled the control authorities to keep in close touch with the reactions of these groups to the program and to obtain a considerable volume of helpful information. Eighteen public hearings were held during the first 10 months of the control program.³¹ From April 1 to December 31, 1934, a total of 151 formal hearings were held. In addition, hundreds of informal hearings were held in which individuals were subpoenaed for questioning. Other hearings involved orders or amendments thereto, and violations of orders.³²

Official Orders.

Official orders issued by the control authorities have been the device used to inform distributors and others of the prices specified by the control authorities and the rules and regulations pertaining to such prices. During the first stages of control, April 1933 through

²⁸ It is to be remembered in this connection that a new producer means any person wishing to sell milk on a regulated fluid milk market whether such person is just beginning in the dairy business or whether he has been in the business for some time and selling to some other market.

²⁹ Report of the Division of Milk Control for 1934, p. 110.

³⁰ *Op. cit.*

³¹ Report of the Milk Control Board for 1933, appendix A.

³² Report of Division of Milk Control for 1934, p. 109.

March 1937, these orders fell into five general classes, namely, (1) orders fixing prices to producers, (2) orders fixing prices to consumers in the metropolitan areas, (3) orders fixing prices to consumers in the up-State areas, (4) orders fixing dealer-to-dealer prices, and (5) miscellaneous orders, requiring the keeping of records, the filing of reports, etc. All told, 121 official orders were promulgated up to the end of the fiscal year 1936.³³

When milk control in the metropolitan area came under both State and Federal jurisdiction in 1938, both governmental agencies issued orders concurrently and each order covered all phases coming under control rather than having different orders for different phases. This same practice was then adopted by the State as a policy for other markets.

Establishment of Market Areas.

By means of this device, areas in which different conditions exist can be designated as separate marketing areas. Orders are then issued which apply specifically to individual areas.

When milk control was first adopted in New York, the State was divided into two basic areas, namely, the metropolitan area and another covering the other incorporated cities and villages of the State having a population of 1,000 inhabitants or more. The latter area was gradually redivided into smaller areas such as cities and counties. Individual orders were at times made to apply to several of these smaller areas on the basis of their proximity and on the basis of the similarities of their marketing conditions.

Milk Classification.

Another device used for the purpose of increasing returns to producers was that of milk classification according to uses. In the metropolitan market nine classes of milk were recognized, except for the brief period from September 25, 1936, to March 31, 1937. During this period the number was reduced to six. Although nine classes of milk were specified for most of both control periods, the definition of certain classes was not identical throughout. The number of classes applicable in up-State markets was somewhat smaller than for the metropolitan area. The classification used in the metropolitan area in 1939 and the products covered are briefly as follows:

Class use	Price per 100 pounds milk, July 1939 ³⁴	Products covered
I.....	\$2.00	Fluid milk.
II-A.....	1.50	Fluid cream.
II-B.....	1.355	Plain condensed milk, also frozen desserts or homogenized mixtures sold in New York City.
III-A.....	1.255	Evaporated milk, sweetened condensed milk, and fancy chocolate milk, milk powder, malted milk powder, and cheeses.
III-B.....	1.031	Cream for storage.
III-C.....	.931	Frozen desserts or homogenized mixtures sold outside of New York City.
III-D.....	.906	Cream cheese and fluid cream sold outside the marketing and production areas.
IV-A.....	.831	Butter.
IV-B.....	.937	American cheddar cheese.

³³ Dealers' buying price for 3.5 percent milk delivered from producers at plants in the 201-210 mile zone. The average price of 92-score butter at wholesale in New York City was 23.8 cents per pound during this month.

³⁴ Report of Division of Milk Control for 1934, p. 11.

The orders specify the price for each class of milk or give a formula for determining the price. In the first period of milk control prices for five of the nine classes of milk in the metropolitan market were arrived at on the basis of formulas. These were built around the prices of the milk products at wholesale in the open market. Thus the formula prices were fixed only in their relationship to the prices of such products as butter and cheese and went up and down with the prices of these products. Prices of milk used in the four remaining classes were fixed in amount by the control authorities and were changed only by amendments or new orders.

In the second period of milk control, 1938-39, prices on all nine classes were based to some extent upon formulas,³⁵ except that an amendment effective November 1, 1939, specified that the class I price should be not less than \$2.82 per hundredweight and that the class II-A price should be not less than \$1.90 until May 1, 1940. This change in method of arriving at prices was made to meet an alleged emergency condition among producers and is presumably of a temporary character. It may be noted that the prices for the respective classes of milk in July, 1939, ranged from \$2 for class I to 83 cents for class IV-A. These are prices at country plants within the 201-210 mile zone for milk as delivered from producers.

Price Equalization.

Price equalization among producers on a market-wide basis was not used in the milk control program in New York State until 1938. Under provisions of earlier orders, prices were equalized on a distributor or cooperative association basis. That is, all producers delivering to a single distributor or cooperative were paid uniform prices. But such prices were not uniform among producers delivering to different distributors unless such sales were pooled by a cooperative such as the Dairymen's League.

Pooling of market proceeds is a useful device for equalizing market opportunities and market burdens among producers. It is particularly necessary where milk is sold on a classified price basis and sales are not uniformly distributed. Without such a device there is likely to be considerable dissatisfaction among producers as would be the case where neighbors sell the same quality of milk on the same market but receive different prices.

Resale Prices.

Resale prices were established in the first period of milk control, 1933-37, for the stated purpose of maintaining orderly marketing and protecting prices to producers.

Through this device resale prices were fixed for fluid milk and cream in different size containers and somewhat according to service rendered. Since these dairy products are commonly sold either by direct delivery to consumers or through stores to consumers, it was considered necessary not only to fix wholesale prices for each kind, size, and grade of product, but also to fix two sets of retail prices depending on whether the sales were made direct to homes or through stores.³⁶ Certain exemptions and special provisions were made on

³⁵ When the wholesale price of butter in New York City averaged between 20 and 24.9 cents per pound, the class I milk was priced at \$2 per hundredweight from April through July and \$2.25 from August through March. In general, for each 5 cents variation in the butter price, the class I price changed 20 cents per hundredweight. The price of class II milk was usually from 35 to 75 cents under the class I price.

³⁶ The usual differential between home delivery and store sales was 1 cent per quart of milk and 1 cent per half pint of cream. Unbottled milk was sold for a time through stores at 1 to 3 cents per quart below the price of bottled milk.

sales to charitable organizations, relief and Government agencies. The important point to note here is that the setting of these prices was intended as a means of helping producers. The general standards used in arriving at these prices have been described earlier in this report under "Operating Standards." The fixing of resale prices for milk products was abandoned with the expiration of the milk control law on April 1, 1937. Later legislation of this type did not include provisions for fixing wholesale and retail milk prices.

Licensing and Bonding.

The licensing and bonding of persons in the dairy industry is not new in the State of New York. However, with the development of milk price control legislation these devices took on new significance.

The licensing power was extended with the milk control program to embody all milk dealers. It became a device for bringing about compliance with orders issued under this and subsequent control laws. It was also a means of raising revenue.

Direct appropriations were made annually by the State for the administration of the milk control law. Annual license fees were, however, designed to reimburse the State for these expenditures. The license fee for regular milk dealers was graduated in amount from \$25 for a dealer receiving not over 4,000 pounds of milk per day to \$5,000 for one receiving over a million pounds per day. The fee per retail store handling milk was \$3. These were the most important fees from the standpoint of revenue. The store license and store fees were not made applicable at the beginning and were discontinued in 1937 when the fixing of resale prices was abandoned.

The revenue from regular milk dealer license fees totaled \$155,000 and from store license fees \$107,000 during the fiscal year 1935-36. These sums together with receipts from miscellaneous sources including penalties practically offset the expense of administering the milk control law.³⁷

Under the program inaugurated in 1938 the local administration is financed by a charge per hundredweight of milk and is paid directly to the market administrator. In the New York area this amount is paid by distributors and is in addition to the prices specified in the order. In the Niagara frontier area (Buffalo and Niagara) this payment is made out of deduction from payments to producers.

The bonding of milk dealers was broadened in the 1934 law to permit the commissioner to require that dealers furnish bond for protection of cooperative associations and other milk dealers from whom milk was purchased. This device has not been used as a means of enforcing milk control orders, but rather as a means of insuring payment to producers for milk delivered and payment to producers' co-operatives. With a few modifications the bonding requirements have continued in force. Securities totaling well over \$2,000,000 are furnished annually. These are in the form of surety bonds, treasury bonds, and depository agreements.

Inspection and Auditing.

When reports are made having so much financial importance as those required of milk distributors it is essential that some system be developed to check their accuracy periodically. This is done under the milk control program largely by means of inspection and audit-

³⁷ Report of the Division of Milk Control for 1936, p. 22.

ing of dealers' operations, records, and accounts. Auditing is clearly important for effective control and even for assuring equitable price relations between distributors themselves. During 1935 the number of milk control investigators was increased from 33 to 41 and the number of milk account examiners (auditors) from 9 to 17.³⁸

With the discontinuance of resale price fixing in 1938 the work of investigators has been greatly lessened. Auditing, however, will continue to be important as long as milk is sold on a classified basis.

RESULTS OF MILK CONTROL

One cannot appraise the milk control program in the State of New York without bearing in mind the conditions under which the program developed, the changes in the law, its administration, interruptions, legal uncertainties, etc. Certainly a uniform program continued over a 6-year period might produce quite different results than those which have occurred under the ever-changing program that has been described for the period of 1933 to 1939.

Effect on Dealers' Buying Prices.

In the initial stages of milk control the program was clearly instrumental in raising dealers' buying prices and, in turn, prices to producers. The first order pertaining to dealers' buying prices became effective May 16, 1933. Minimum prices for class I milk were fixed at \$1.88 per hundredweight of milk testing 3.5 percent butterfat, purchased in the 200-210 mile zone. This was an increase of 60 cents over the price prevailing just prior thereto.³⁹ The class I price was increased by another 7½ cents on July 1, 1933. The occasion was a decrease in railroad rates on milk shipped to New York City. Drought conditions in the latter part of June and during July were alleged to have seriously impaired pastures and reduced milk production. Primarily because of this condition the class I price was again increased by 35 cents on July 21. This brought the total price rise up to \$1.02½ per hundredweight in a period of a little over 2 months. Prices were also raised on some of the other classes of milk, such as milk for fluid cream and for ice cream. Some of the increase in prices was to be expected because of the abnormally low prices prevailing at the time the program started and might have come about without the aid of price control. However, it is safe to say that much of it was due directly to official orders issued under authority of the milk control law.

After 1933, the effect of the control program upon dealers' buying prices is not as clear. The improvement in general business, and changes in other conditions as well, make it impossible to give a satisfactory estimate of the net effect of milk control. Moreover, considerable violation was reported in dealers' buying prices and no accurate measurement could be made of this factor.

The trends in dealers' reported buying prices for class I milk in the metropolitan and Buffalo markets are shown in appendix to chapter VI, tables I and III, and in charts XII and XIII. These reported prices may contain considerable error, particularly during the latter half of 1936 and the first part of 1937.⁴⁰ Aside from this

³⁸ Report of Division of Milk Control for 1935, p. 119.

³⁹ Report of the milk control board, 1933, pp. 4-5.

⁴⁰ Charts XII and XIII show a rise in dealers' buying prices in September 1936. The class I price was increased in the orders for these markets, but there was apparently little compliance.

Prices Paid to Farmers in New York Milkshed for Milk by Sheffield Farms, Inc., and by Dairymen's League

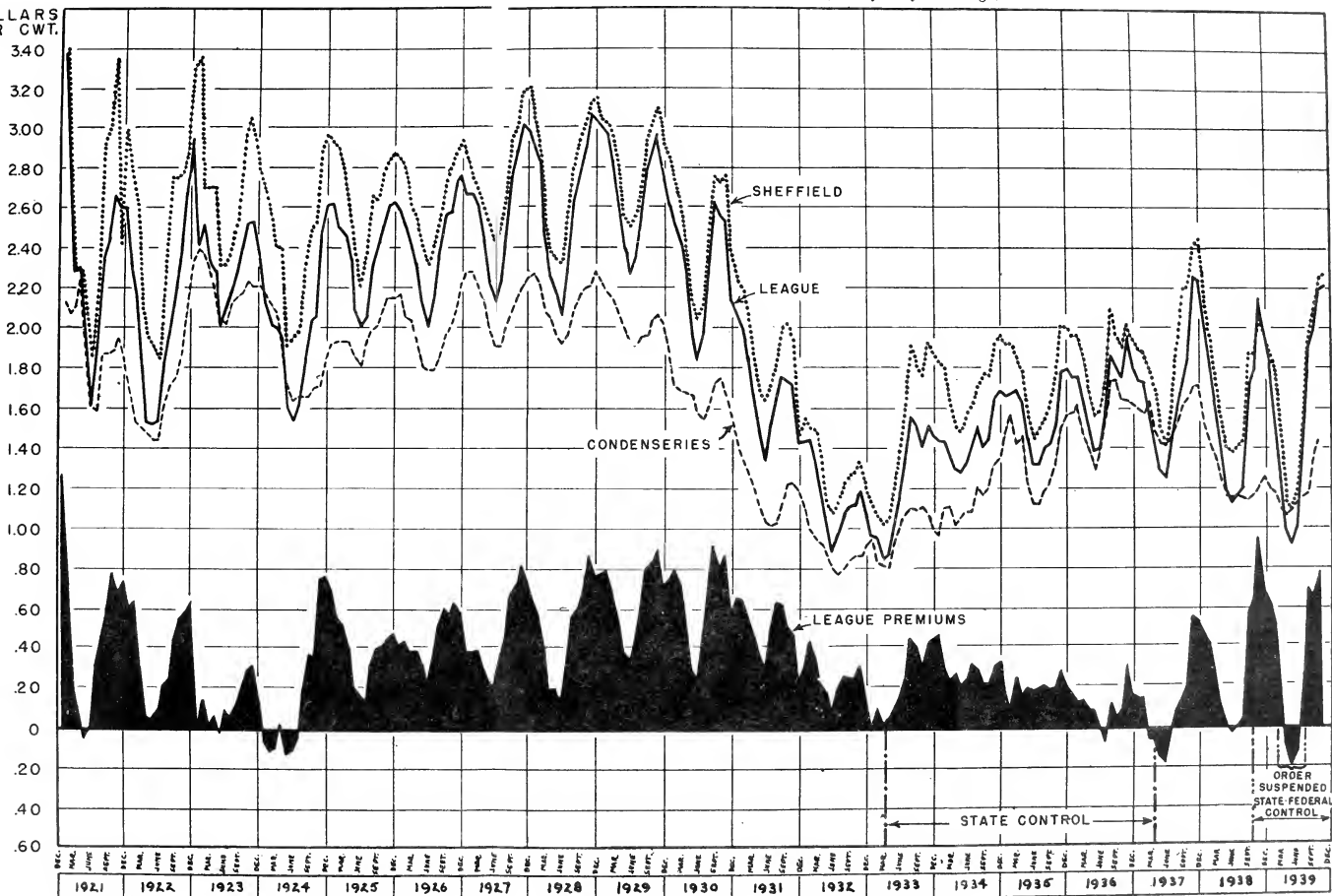
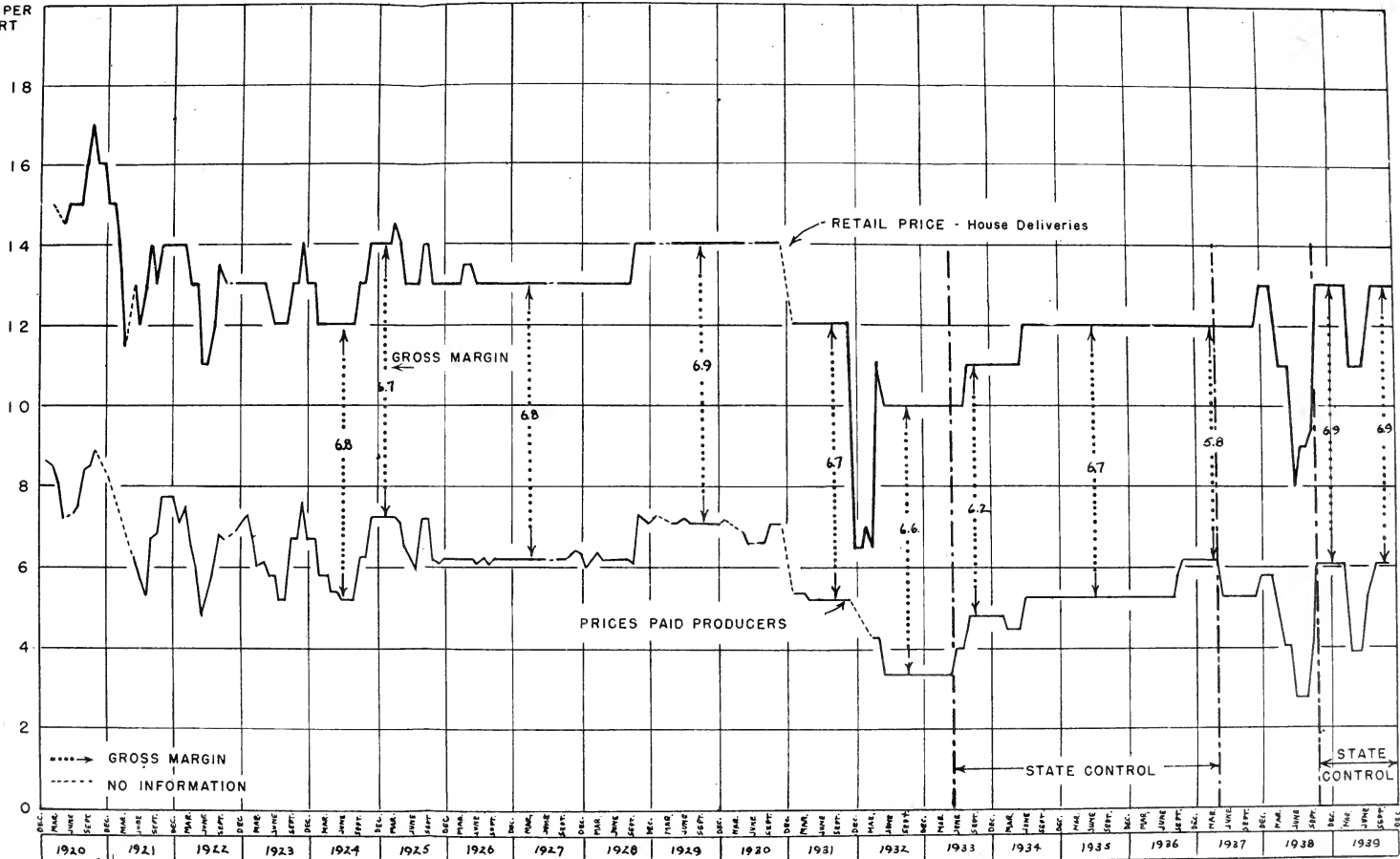
DOLLARS
PER CWT.

CHART XIII
Fluid Milk Prices in Buffalo, N. Y., 1920-39

CENTS PER
QUART



period the charts are believed to represent the general movements of these prices. After State control had gotten well under way there was little change in the reported price of class I milk to dealers for nearly 3 years. This represented more stability in buying prices than in any other period of equal length in the past 25 years or more. However, it is to be noted that while this price was being maintained at a given level, dairy prices generally were rising.

When price control ended early in 1937 the class I price in the metropolitan area is shown to have turned very irregular, first dropping sharply then recovering only to be followed by another drop.

The issuance of the State and Federal orders for the metropolitan area on September 1, 1938, again resulted in substantial increase in the dealers' buying prices as evidenced in chart XII. The prices are reported to have declined precipitously when the Federal order was suspended early in 1939, although exact prices are not available. With the reinstatement of this order, after the favorable United States Supreme Court decision,⁴¹ the buying prices again rose. Still further rises occurred as a result of the LaGuardia agreement and amendments to the State and Federal orders.

In the Buffalo market (chart XIII) the class I price followed much the same course as that described for the metropolitan area. The principal difference is that it dropped less in 1937, but more in the summer of 1938.

Effect on Producer Prices and Production.

The dealers' buying price for fluid milk is, of course, only one of several factors influencing the average price to producers. The proportion of milk used for each class and the price thereof, combine to make up this average price. Thus not only price but also production and sales are important in determining average prices to producers.

The prices paid producers monthly for all milk by the Sheffield Farms Co., Inc.,⁴² and by the Dairymen's League are shown for a 19-year period in appendix to chapter VI, tables V and VI, and in chart XIV. These two firms receive milk from the majority of producers supplying the market and are believed to be a fair indication of the usual prices paid in the area. The average prices paid for milk at condenseries in the United States are also indicated in appendix to chapter VI, table VII, and in chart XIV. This series was chosen as a basis of comparison since it was available for the entire period and since class II-B and class III-A prices in present orders for the metropolitan area are based directly on average prices paid at nearly a score of condenseries in the Midwest. It is not intended that this series of prices will indicate what the price relationship ought to be, but will merely show what the trend has been over a period of years.

It will be noted that the premiums over the condensery price (shown in table VIII and chart XIV) have been very irregular in size and have a considerable seasonal factor. It will also be noted that under the first period of State control, 1933-37, there was less seasonal variation in these premiums and there was a general downward trend in premiums by the league over condensery prices. During this period condensery prices were tending upward. There was a sharp rise in the premiums paid during the latter part of 1937, apparently

⁴¹ *U. S. v. Rock Royal Cooperative, Inc., et al.*, 307 U. S. 533, 1939.

⁴² The Sheffield Farms Co., Inc., is the largest fluid milk distributor in the New York metropolitan area and is a subsidiary of the National Dairy Products Corporation.

due in part to agreements between producer agencies and distributor agencies under the Rogers-Allen law. This premium disappeared by the middle of 1938. Shortly thereafter, September 1, 1938, the Federal-State orders were issued for the metropolitan market. It will be noted again that the premiums completely disappeared in early summer of 1939—in fact the average prices of the league were as much as 20 cents under condensery prices in 1 month. Still another change which may be observed is that the Sheffield and league prices have been brought together since the inauguration of the market-wide pool of Federal-State orders, while formerly there was considerable difference in these prices.

The effect of price control on the production of milk in New York State is difficult to determine. Total milk production in the State decreased from 1931 to 1935. (See appendix to chapter VI, table IX, and in chart XV.) This decrease was particularly apparent from 1933 to 1934. It should be noted that the change in production was roughly proportional to the change in the number of cows and heifers of milking age. The causes for this decrease in cow numbers and in production and their subsequent rise are probably numerous.⁴³ The probable effect of milk control upon production is more apparent when production data are confined to producers supplying the metropolitan area.⁴⁴ Such data indicate a rise in production per dairy (farm) per day of fully 30 pounds or about 15 percent from 1934 to 1939. But here again milk control may be only one of several factors. However, relatively high milk prices would appear to have been a very important factor in the increase in milk production per dairy during the fall and winter months of 1939 following a severe drought in much of the production area supplying the metropolitan market.

Interstate Character of Supply.

The four States—New York, Pennsylvania, New Jersey, and Vermont (in order of importance)—which furnish nearly all of the supply of milk to the metropolitan area have all had State milk control programs during most of the time since 1933. At no time have these State programs been coordinated on a market-wide basis. It is natural then to expect that they might tend to affect in different ways the sources of supply for this market.

The percentage of the total milk shipped into the metropolitan area from 1927 to 1938 by each of these four States is shown in appendix to chapter VI, table X, and in chart XVI. It will be noted that there was a relatively steady downward trend in the percentage of milk supplied by New York producers from 79 percent in 1927 to 63 percent in 1935. Since 1935, there has been some increase in the percentage of milk supplied by New York farmers. The trend in Pennsylvania has been in the opposite direction to that in New York. The percentage of milk supplied by this State increased from 10.5 to 19 percent from 1927 to 1935 and then dropped to 15.6 percent in 1938. The proportion coming from New Jersey increased from about 6 percent in 1931 to nearly 12 percent in 1935 and then appears to have leveled off. Vermont's supply increased from 2 percent in 1927 to a peak of

⁴³ During the period prior to 1936 an intensive bovine tuberculosis eradication program was being carried on. Many herds were found to be contaminated by the disease and as a result there were many replacement problems. This was probably the largest single factor in the decline in milk production in the State during this period. It was also to be expected that there would be some rise in production in the years immediately thereafter.

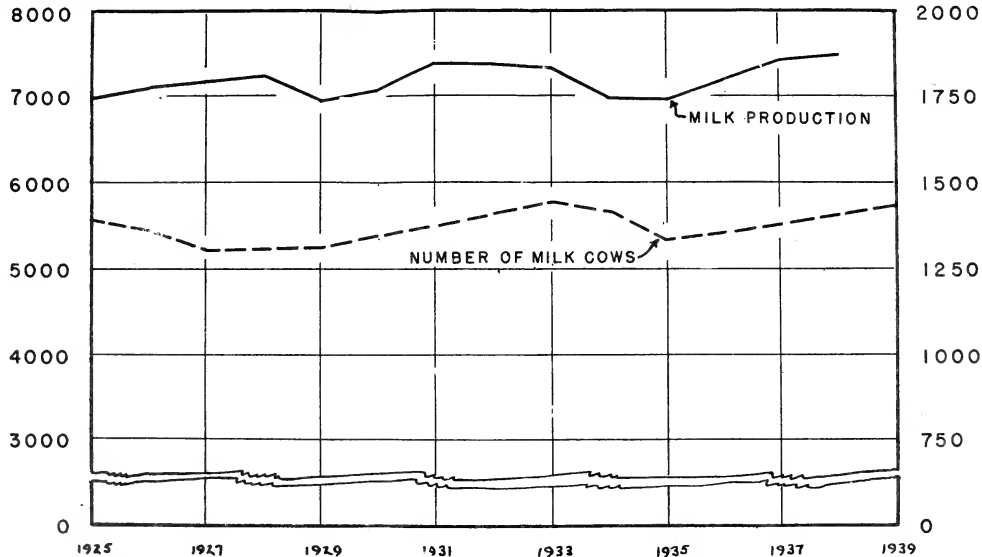
⁴⁴ A compilation of statistical material—Metropolitan Milk Marketing Area, Dairy Section, Division of Marketing and Marketing Agreements, U. S. Department of Agriculture, February 1940, table 49.

MILK PRODUCTION
MILLION POUNDS

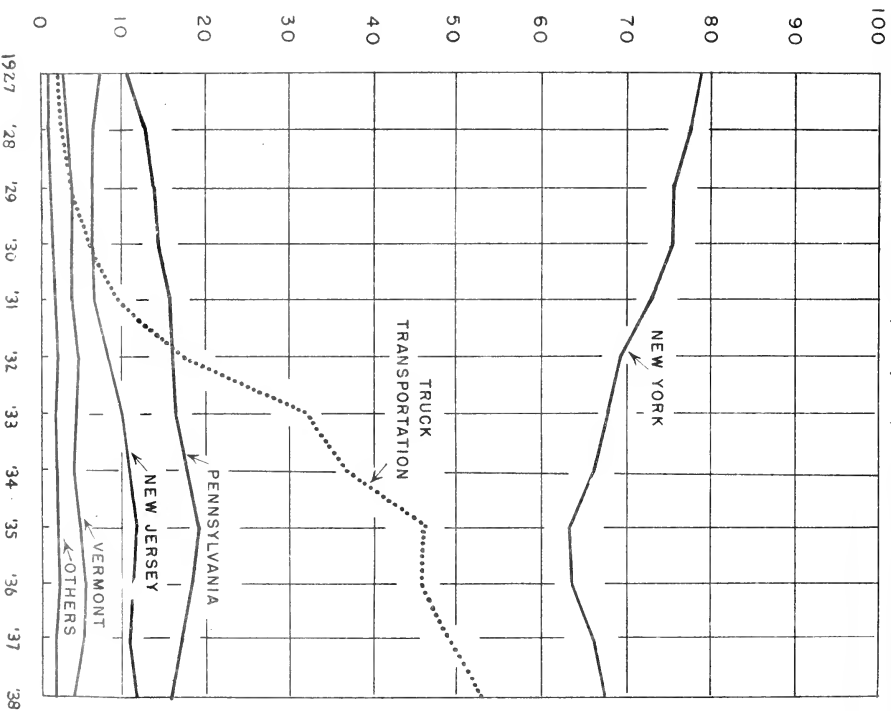
CHART XV

Milk Production and Number of Milk Cows, New York State, 1925-39

NUMBER OF COWS
THOUSAND HEAD



Percentage of Fluid Milk Receipts in the New York Metropolitan Area, by State of Origin, and Percentage of Total Transported by Truck, 1927-38



5 percent in 1936 and then declined. All other areas have not furnished more than 2 percent of the total in any year since 1927.

These shifts in proportions of milk coming from different States are probably due largely to the increased use of the truck as a means of transporting milk.⁴⁵ Dairy plants and rural communities not having direct rail connections to New York City were made accessible as a source of daily supplies of milk by this new form of transportation. It may be noted from figure 5 that the percentage of milk hauled by trucks has increased from less than 5 percent prior to 1930 to over 50 percent in 1938. This change from rail to truck has been most pronounced in areas nearest the market.⁴⁶ With the improvement of both highways and trucks in recent years this type of transportation has extended its influence to a distance of more than 200 miles. The truck is, of course, also important in assembling milk from farms to railway loading stations. It is, however, the shift from rail to truck transportation that we are more interested in here since this new mode of transportation has made available new supplies of milk.

It is not clear to what extent milk control programs in these four States may also have been a factor in the shifts in supply noted above, and, in turn, to what extent the flexibility in supply has been a factor limiting the effectiveness of State control. It appears that the latter is more important than the former. The complex nature of the New York market and consequently the possibility of losing part of the market if prices in any one State were seriously out-of-line with prices in other States has undoubtedly been a restraining influence in the administration of the State milk control programs.

At this point it is of importance to note the difference in the New York State and New Jersey control programs with respect to out-of-State milk. In New York State an attempt was made to price out-of-State milk substantially the same as milk coming from farms within the State.⁴⁷ In New Jersey no attempt was made to regulate the purchase price of out-of-State milk, but only to regulate its use. Under this plan dealers were required to pay New Jersey producers the "norm" or fluid price for all of their milk so long as their deliveries did not exceed fluid sales. Resale prices (wholesale and retail) were regulated by the State regardless of the original source of supply. This procedure seemed to work more effectively than the one attempted in New York State, but nevertheless the flow of interstate milk has apparently become an increasingly difficult problem for the State control agency in New Jersey. Moreover, the fact that this State's production of milk has been less than the fluid consumption within the State tended to favor its program.

Effect on Producer Cooperatives.

The New York State milk control program, while probably not designed to give producer cooperatives special advantages, was certainly not intended to harm them. Actually the control program brought the State and the cooperative movement into peculiar relationships at several points. The formation of several small "dealer-encouraged" cooperatives was used as a means of evading certain provisions of the earlier orders. This was harmful to the control program and not helpful to the cooperative movement.

⁴⁵ For a discussion of the development of truck transportation see Varney, H. R., "Transportation of Milk and Cream to the New York Market." Cornell University Agricultural Experiment Station, Bulletin 655.

⁴⁶ *Ibid.*, p. 22.

⁴⁷ *Baldwin et al. v. Seelig, Inc.* (294 U. S. 511 (1935)).

The distribution of market proceeds on a dealer basis from 1933 to 1937 put certain cooperatives, such as the Dairymen's League, at a distinct disadvantage as compared with some other groups of producers. This was because the League carried a large proportion of the "surplus" milk which fell in the lower price classes.

On the other side of the picture one finds that the dealer-bonding law was broadened to protect producer cooperatives as well as individual producers because their interests were so nearly identical. Under the two orders issued in 1938 for the metropolitan area and for the Niagara Frontier area (Buffalo) market proceeds are pooled and producers are paid uniform blended prices. Payments are made from the producer settlement fund for the usual cooperative services and special payments are made for certain marketing services in the transportation and processing of milk. These latter payments are independent of the usual price differentials for location and use of product. While the payments for market services are available to all firms actually they favor those firms with a large amount of country plant operations. The Dairymen's League is in this group. Likewise the distribution of "cooperative payments" from the producer settlement fund to certain types of producer cooperative associations operating under recent Federal and State orders effective in New York must also be looked upon as distinctly favorable to cooperatives and particularly to "operating" cooperatives. In fact one might question if these cooperative payments do not represent a serious form of price discrimination between cooperative and proprietary types of handlers of milk.

Resale Prices and Consumption.

One of the first official acts of the New York Milk Control Board in 1933 was the fixing of resale milk and cream prices throughout the State. This was done even prior to the fixing of dealer buying prices. Resale price fixing was continued as part of the milk control program of this State until March 31, 1937.

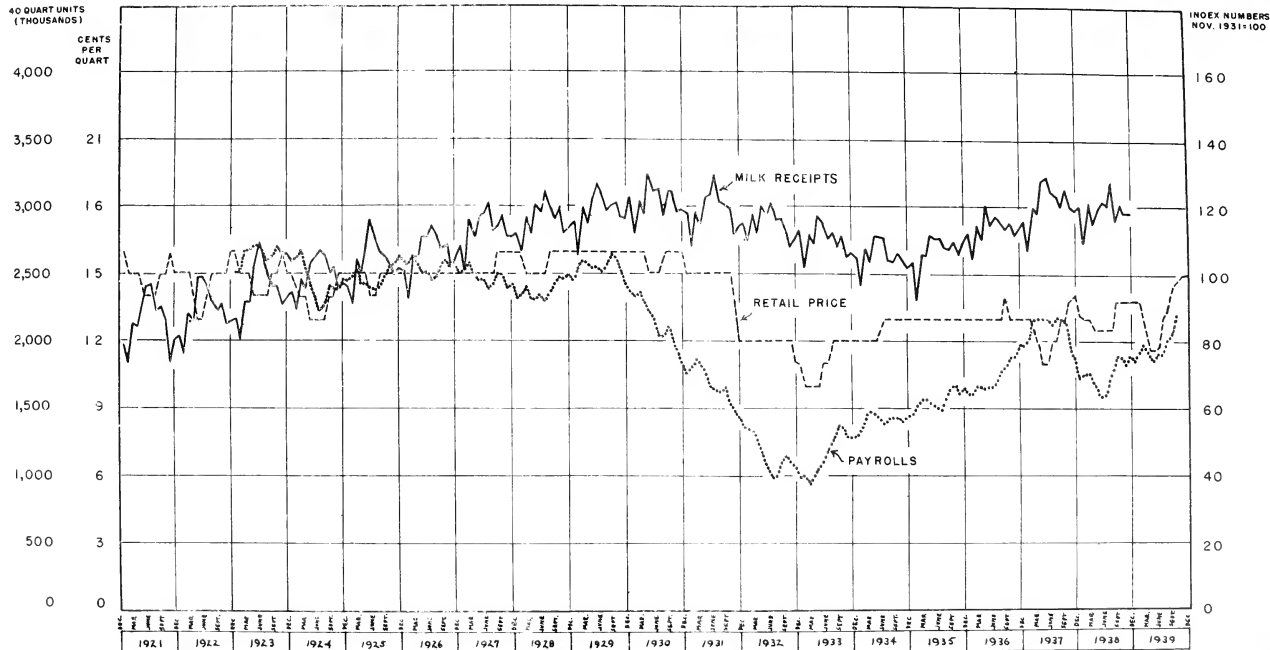
That the setting of resale prices alone would not suffice as a means of improving farm prices for milk was soon apparent to the Milk Control Board. The Board further expressed itself as of the opinion that the fixing of resale prices had brought stability into the market but that all the benefits accruing therefrom to distributors had not been passed on to producers.⁴⁸ It continued to support the view that resale price fixing was desirable under certain conditions, but that this should not be mandatory. The fixing of resale prices was regarded as virtually mandatory under the law if prices for milk from producers were to be fixed.

From the beginning in 1933, the enforcing of resale prices became an acute problem. The enforcement of prices to stores, restaurants, hotels, hospitals, and other institutions at wholesale was reported as far more difficult than the enforcement of retail prices since individual transactions at wholesale usually involve much larger sums and are difficult to check. Innumerable schemes were devised to avoid compliance. Observance of specified prices was better in the up-State markets than in the metropolitan area, but even here violations were frequent.⁴⁹ The differential of 1 cent per quart in resale

⁴⁸ Report of the Milk Control Board for 1933, p. 4.

⁴⁹ Report of the Division of Milk Control for 1934, p. 109.

Monthly Receipts of Fluid Milk, Retail Home Delivery Price per Quart of Fluid Milk, and Index of Factory Pay Rolls, New York Market, 1921-39



prices between "advertised" and "unadvertised" milk was at one time regarded as the most serious obstacle to market stability.⁵⁰

It was predicted that if resale prices were to be discontinued a destructive price war would be certain to follow.⁵¹ A real test of this prediction has not been made since the fixing of dealers' buying prices was discontinued the same day that the fixing of resale prices was dropped. An interesting observation is possible from charts XII and XIII. These charts show that when the price control program stopped at the end of March 1937 dealers' buying prices dropped more than retail prices in both the New York and Buffalo markets. In fact, in the latter market there was no serious retail price decline until about a year later.

An indication of the trend of consumption of fluid milk in the metropolitan area in its relation to pay rolls and to the retail home delivery price of milk may be observed from chart XVII, based on the data in appendix to chapter VI, tables II, XI, and XII. Receipts of milk in the New York market were upward from 1921 until 1932.⁵² The retail price of milk and the index of pay rolls remained fairly constant during the first 9 years of this period. From October 1929 until March 1933, the index of pay rolls declined over 60 percent, the retail price of milk dropped 37.5 percent, whereas the receipts of milk dropped less than 10 percent. Milk receipts continued downward until early 1935. Following this the receipts increased gradually until 1937. At least in the past decade the consumption of milk in this market appears to have been influenced more by changes in pay rolls than changes in retail prices of milk.

Although total milk consumption in the metropolitan area did not decrease to a very great extent from 1931 to the spring of 1935, the per capita consumption probably decreased somewhat more. Likewise, the total receipts in 1937 and 1938 are shown to be substantially the same as in these latter years because of the increase in population.

During this period other changes were taking place which may have had some effect upon total consumption. Among these was the shift from home delivery to store sales. From December 1929 to December 1938 home delivery sales dropped from approximately 57 to 47 percent.⁵³ During the same period store sales increased from 43 to 52 percent.⁵³ Since June 1933 the sale of loose or dipped milk has been prohibited at retail stores in New York City, while prior thereto it had been permitted. Since 1935 the sale of milk in paper containers has developed extensively through retail stores. In recent years the State of New York has carried on an extensive advertising program intended to increase the consumption of milk.

Dealers' Margins.

In both the metropolitan and Buffalo markets the spread between dealers' buying prices and the retail delivery price of milk, as reflected in charts XII and XIII, averaged less during the period of resale price fixing than it did in the previous and subsequent periods. This is contrary to the general opinion that distribution margins are always wider under public regulation.

⁵⁰ *Ibid.*, p. 115.

⁵¹ *Ibid.*, p. 112.

⁵² Receipts of whole milk in the metropolitan area are considered a good measurement of amounts consumed as fluid milk. These figures are at least an accurate indication of changes in consumption.

⁵³ Spencer, L. *Journal of Farm Economics*, February 1939, p. 291

In considering resale prices and margins it should be noted that the prices referred to are the prevailing prices reported for these markets. They do not show to what extent there are variations from these prices by any particular dealers. While the margins indicated in charts XII and XIII apply to only one type of sale, the trend is believed to be indicative of changes in other types of sales as well. It should not, however, be taken as a measurement of dealers' average margins on all sales for any particular time.

Bonding.

Although the requirement that dealers furnish bond to assure full payment to producers appears to be firmly established from a legal standpoint, it has many practical difficulties in its application. This seems to have been the experience of administrative authorities in New York State since this feature was put into practice in 1915.

Since its inauguration many thousands of dollars have been recovered from bonds and other security of defaulting dealers and paid to producer creditors. Part of the experience record of the bonding program is reflected in the data in table 20. Approximately 60 per cent was paid on the claims of 768 producers against 27 dealers in default during this period.

The bonding of milk dealers has undoubtedly been of more benefit to producers than these figures alone would indicate. It has probably prevented some persons of questionable financial standing from entering the business at all, and has very likely caused others to make more prompt and complete payments than otherwise. The obtaining of bonds of sufficient size is reported as increasingly difficult due to the hesitancy of surety companies to assume this type of risk without full collateral of a type that is easily liquidated.

Other Results.

Milk control in New York State has had other effects. The value of some of these are not subject to measurement but they are, nevertheless, real. Probably no other State handling milk control legislation presents such a combination of economic forces as has prevailed in this State.

TABLE 20.—*Dairy companies in default, producer claims, and amounts recovered from bonds and other security, 1934-38*

Year	Number dairy companies in default	Number producer claims	Amount of claims	Amount recovered
1934	12	452	\$41,840.32	\$33,736.98
1935	4	42	5,859.95	5,051.62
1936	5	209	59,568.68	26,828.29
1937	6	65	30,406.82	17,261.14
1938	5	200	50,794.78	18,041.70

¹ 2 of these were cooperatives.

Source: Data compiled from annual reports of New York State Department of Agriculture and Markets.

One of the intangible effects of this program is the progress that has been made toward clarifying the legal issues involved in State milk control, including a defining of division lines between "intra" and "inter" State commerce as applied to fluid milk marketing. Several

of these issues were outlined in a footnote on page 199. Certainly more cases in New York have been carried through the State and Federal courts than in any other State. More fluid milk control cases have gone from this State to the United States Supreme Court for decision than from all other States combined. This extensive legal development has resulted in clearing away some of the legal haze that has surrounded public price control in fluid milk marketing.

Experience with administration of the milk control laws in New York has demonstrated the difficulties involved in such things as resale price fixing, licensing, bonding, and the regulating of dealers' buying prices. The magnitude of the industry in New York State tends to make administrative problems more acute and to put them in sharper focus than in other States. For example, the State licensed over 4,000 regular distributors and 33,000 stores.⁵⁴ It made over 60,000 inspections, 40,000 price investigations, and nearly 12,000 license, audit, and "report" investigations within a single year.⁵⁵ No special analysis has been made of these phases of the work, but this extensive experience in a new type of public control should be of value in the future.

⁵⁴ Report of Division of Milk Control for 1934, p. 88.

⁵⁵ *Ibid.* p. 118.

APPENDIX TO CHAPTER VI

TABLES GIVING DATA ON MILK PRICES IN NEW YORK CITY AND BUFFALO, N. Y.

TABLE I.—Dealers' monthly average buying price for class I milk (3.5 percent) New York City, 1922-39¹

[Cents per quart²]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1922	7.1	6.9	5.8	5.4	4.2	4.2	5.2	6.2	6.7	6.7	6.7	7.7
1923	7.2	6.7	6.4	6.4	5.4	5.4	5.4	6.0	6.8	7.1	7.0	6.4
1924	5.6	5.4	5.4	5.4	4.4	4.4	4.4	5.4	6.0	6.0	7.0	7.0
1925	7.0	7.0	6.7	6.4	6.0	5.4	5.8	6.4	6.4	6.4	6.4	6.4
1926	6.4	6.4	6.4	6.4	6.3	6.3	6.3	6.3	6.7	6.7	6.7	6.7
1927	6.4	6.4	6.4	6.3	6.3	6.3	6.3	6.6	7.2	7.2	7.4	7.4
1928	7.2	7.2	6.4	6.2	6.2	6.2	6.8	7.2	7.4	7.4	7.4	7.4
1929	7.4	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.4	7.4	7.4
1930	7.2	7.2	7.2	7.2	6.4	6.4	6.4	7.0	7.2	7.2	7.2	6.5
1931	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	5.4	3.9
1932	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.3
1933	3.1	2.8	2.8	2.8	3.4	4.0	4.5	5.0	5.0	5.0	5.0	5.0
1934	5.0	4.8	4.7	4.7	4.7	5.1	5.3	5.3	5.3	5.3	5.3	5.3
1935	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1936	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.5	6.2	6.2	6.2	6.2
1937	6.2	6.2	6.2	4.4	3.5	3.5	4.3	4.5	5.0	5.0	5.5	5.6
1938	4.9	4.7	4.7	4.3	4.3	4.3	4.3	4.3	5.3	5.3	5.3	5.3
1939	5.3	5.3	5.3				4.3	4.8	5.6	6.1	6.1	6.1

¹ Data for 1922 to July 1939: Prices paid by New York Dairymen's League, table 26, Bulletin of Statistical Material Covering Order No. 27 and the New York Metropolitan Milk Marketing Area, prepared by Dairy Section, Division of Marketing and Marketing Agreements, U. S. Department of Agriculture.

Data August to December 1939: Table 2 of February 1940 issue of the above described bulletin.

² Price per hundredweight divided by 46.5.

TABLE II.—Monthly average retail price of fluid milk (house deliveries), New York City, 1920-39¹

[Cents per quart]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920		16	16	15	15	15	16	17	18	18	18	17
1921	17	16	15	15		14	14	15	15	15	15	15
1922	15	15	15	14	13	13	14	15	15		15	16
1923	16	15	15	15	14	14	14	14	15	15	16	15
1924	15		14	14	13	13	13	13	14	14	15	15
1925	15	15	15	15	15	14	14	15	15	15	15	15
1926	15	15	15	15	15	15	15	15	15	15	15	15
1927	15	15	15	15	15	15		15	16		16	16
1928	16	16	15	15	15	15	15	16	16	16	16	16
1929	16			16	16	16	16	16	16	16	16	16
1930	16	16	16	16	15	15	15	15-16	16	16	16	15-16
1931	15	15	15	15	15	15	15	15	15	15	14	12
1932	12	12	12	12	12	12	12	12	12	12	12	11
1933	11	10	10	10	10-11	11	11	12	12	12	12	12
1934	12	12	12	12	12	13	13	13	13	13	13	13
1935	13	13	13	13	13	13	13	13	13	13	13	13
1936	13	13	13	13	13	13	13	13	13-14	13	13	13
1937	13	13	13	12	11	11	12	12	13	13	14	14
1938	13½	13	13	12½	12½	12½	12½	12½	13½	13½	13½	13½
1939	13¾	13¾	13¾	11½	11½	11½	13	13½	14½	14½	15	15

¹ U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.

TABLE III.—Dealers' monthly average buying price for basic milk (3.5 percent), Buffalo, N. Y., 1920-39¹[Cents per quart²]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920	8.6	8.5	8.1	7.2	6.2	7.3	7.5	8.4	8.5	8.9	8.2	8.2
1921	7.1	7.5	6.5	6.0	4.8	5.7	5.3	6.7	6.8	7.7	7.7	7.7
1922	7.3	6.7	6.0	6.1	5.8	5.8	5.8	6.8	6.7	6.9	6.9	7.1
1923	6.7	5.8	5.8	5.4	5.4	5.2	5.2	5.2	6.2	6.2	7.2	7.2
1924	7.2	7.2	7.2	7.1	6.5	6.2	5.9	7.2	7.2	6.2	6.1	6.2
1925	6.2	6.2	6.2	6.2	6.2	6.1	6.2	6.1	6.2	6.2	6.2	6.2
1926	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.3	6.4	6.3
1927	6.0	6.2	6.4	6.2	6.2	6.2	6.2	6.2	6.1	7.3	7.2	7.1
1928	7.3	7.1	7.1	7.1	7.1	7.2	7.1	7.1	7.1	7.1	7.1	7.1
1929	7.2	6.9	6.6	6.9	6.6	6.6	6.6	6.6	7.1	7.1	7.1	7.1
1930	5.4	5.4	5.4	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
1931	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1932	3.4	3.4	3.4	3.4	3.4	4.0	4.0	4.8	4.8	4.8	4.8	4.8
1933	4.8	4.8	4.5	4.5	4.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1934	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1935	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1936	6.2	6.2	6.2	6.2	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1937	5.8	5.8	4.9	4.1	4.1	2.8	2.8	2.8	4.1	6.1	6.1	6.1
1938	6.1	6.1	6.1	3.9	3.9	3.9	5.3	6.1	6.1	6.1	6.1	6.1
1939												

¹ Source: Computed from hundredweight prices published in Fluid Milk Market Reports of Bureau of Agricultural Economics and Agricultural Marketing Service, U. S. Department of Agriculture.² Hundredweight price divided by 46.5.TABLE IV.—Monthly average retail price of fluid milk (house deliveries) Buffalo N. Y., 1920-39¹

[Cents per quart]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920	15	15	14½	15	15	15	15	16	17	16	16	15
1921	15	14	11½	13	12	13	14	13	14	13	14	14
1922	14	14	13	13	11	11	12	13-14	13	13	13	13
1923	13	13	13	13	12-13	12	12	12	13	13	14	13
1924	13	12	12	12	12	12	12	12	13	13	14	14
1925	14	14	14-15	14	13	13	13	14	14	13	13	13
1926	13	13	13	13-14	13-14	13	13	13	13	13	13	13
1927	13	13	13	13	13	13	13	13	13	13	13	13
1928	13	13	13	13	13	13	13	13	13	14	14	14
1929	14	14	14	14	14	14	14	14	14	14	14	14
1930	14	14	14	14	14	14	14	14	14	14	14	14
1931	12	12	12	12	12	12	12	12	12	12	12	6-7
1932	6-7	7	6-7	11	10	10	10	10	10	10	10	10
1933	10	10	10	10	10	10	10	10	11	11	11	11
1934	11	11	11	11	11	12	12	12	12	12	12	12
1935	12	12	12	12	12	12	12	12	12	12	12	12
1936	12	12	12	12	12	12	12	12	12	12	12	12
1937	12	12	12	12	12	12	12	12	12	12	12	13
1938	13	13	11	11	11	8	9	9	9-10	13	13	13
1939	13	13	13	11	11	11	12	13	13	13	13	13

¹ Source: U. S. Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service: Monthly Fluid Milk Market Report.

TABLE V.—*Net prices paid producers by Sheffield Farms Co. for 3.5 percent milk, 201-210 mile freight zone, 1910-39*¹

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910.....	1.87	1.82	1.62	1.42	1.12	0.92	1.22	1.42	1.72	1.82	1.87	1.92
1911.....	1.92	1.87	1.67	1.32	1.07	.92	1.12	1.37	1.52	1.67	1.82	1.82
1912.....	1.77	1.72	1.57	1.42	1.17	.92	1.22	1.52	1.62	1.72	1.82	1.92
1913.....	1.87	1.67	1.62	1.47	1.22	1.07	1.27	1.47	1.62	1.82	1.82	1.87
1914.....	1.77	1.67	1.62	1.32	1.07	1.02	1.17	1.32	1.42	1.72	1.82	1.82
1915.....	1.77	1.67	1.62	1.30	1.05	1.00	1.15	1.30	1.40	1.68	1.78	1.78
1916.....	1.68	1.63	1.53	1.43	1.33	1.08	1.23	1.38	1.43	2.12	2.22	2.22
1917.....	2.23	2.18	2.13	2.105	2.07	1.97	2.17	2.62	2.62	3.26	3.50	3.26
1918.....	3.70	3.52	3.40	2.68	2.64	1.98	2.42	2.87	3.07	3.76	3.98	4.23
1919.....	4.18	3.72	3.48	3.01	3.27	3.10	3.22	3.34	3.42	3.32	3.54	3.89
1920.....	3.90	3.69	3.57	2.76	2.76	3.04	3.16	3.56	3.86	3.86	3.86	3.39
1921.....	3.39	2.79	2.30	2.30	2.135	1.86	2.265	2.93	3.015	3.365	2.42	2.99
1922.....	2.805	2.62	2.10	1.95	1.90	1.85	2.30	2.75	2.75	2.775	2.925	3.30
1923.....	3.35	2.705	2.705	2.705	2.315	2.315	2.40	2.575	2.95	3.05	2.952	2.78
1924.....	2.685	2.55	2.405	2.405	1.905	1.95	1.98	2.31	2.495	2.52	2.89	2.96
1925.....	2.93	2.90	2.775	2.575	2.365	2.205	2.385	2.66	2.64	2.78	2.835	2.875
1926.....	2.845	2.80	2.615	2.545	2.40	2.325	2.415	2.57	2.735	2.80	2.87	2.94
1927.....	3.04	2.74	2.69	2.595	2.50	2.42	2.505	2.64	2.93	3.01	3.18	3.20
1928.....	2.85	2.875	2.53	2.385	2.345	2.325	2.575	2.80	2.94	3.025	3.13	3.15
1929.....	3.045	3.025	2.95	2.80	2.565	2.50	2.575	2.76	2.94	3.035	3.10	2.92
1930.....	2.84	2.715	2.60	2.40	2.145	2.04	2.12	2.44	2.76	2.73	2.75	2.33
1931.....	2.245	2.205	2.05	1.86	1.675	1.63	1.745	1.865	2.02	2.03	1.925	1.47
1932.....	1.54	1.505	1.49	1.295	1.12	1.08	1.14	1.23	1.27	1.29	1.34	1.20
1933.....	1.11	1.06	1.02	1.05	1.205	1.38	1.595	1.91	1.795	1.75	1.92	1.87
1934.....	1.83	1.805	1.605	1.505	1.485	1.58	1.62	1.72	1.77	1.78	1.92	1.96
1935.....	1.92	1.92	1.85	1.78	1.58	1.45	1.50	1.55	1.62	1.78	2.01	2.00
1936.....	1.96	1.96	1.84	1.69	1.55	1.58	1.76	2.10	1.96	1.90	2.02	1.94
1937.....	1.89	1.88	1.78	1.69	1.50	1.40	1.63	1.90	2.20	2.20	2.42	2.44
1938.....	2.13	1.96	1.77	1.52	1.40	1.38	1.40	1.43	1.87	1.87	2.05	1.98
1939.....	1.87	1.78	1.46	1.14	1.10	1.20	1.50	1.95	2.08	2.26	2.27	-----

¹ Source: L. Spencer, Cornell University, Ithaca, N. Y. (Prices for 3.7 percent milk converted to 3.5 percent basis.) Data for 1910-20 not used in graph.

TABLE VI.—*Dairymen's League net pool prices for 3.5 percent milk, 201-210 mile freight zone, 1921-39*¹

(Dollars per 100 pounds)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1921.....	3.38	2.78	2.29	2.30	1.91	1.62	1.90	2.35	2.44	2.67	2.62	2.59
1922.....	2.31	2.17	1.80	1.535	1.50	1.545	1.82	1.955	2.20	2.41	2.665	2.95
1923.....	2.41	2.61	2.33	2.275	2.02	2.115	2.185	2.285	2.40	2.52	2.53	2.35
1924.....	2.12	2.02	2.00	1.95	1.60	1.54	1.62	1.835	2.045	2.06	2.46	2.61
1925.....	2.615	2.50	2.46	2.335	2.09	2.00	2.05	2.30	2.415	2.51	2.61	2.63
1926.....	2.59	2.51	2.42	2.315	2.135	2.01	2.15	2.36	2.56	2.58	2.72	2.80
1927.....	2.67	2.67	2.60	2.44	2.22	2.13	2.24	2.42	2.75	2.88	3.02	2.99
1928.....	2.90	2.80	2.48	2.25	2.16	2.06	2.28	2.63	2.78	2.89	3.08	3.04
1929.....	3.01	2.97	2.83	2.61	2.39	2.27	2.36	2.57	2.78	2.88	2.97	2.74
1930.....	2.62	2.51	2.42	2.26	1.97	1.84	1.98	2.34	2.64	2.56	2.54	2.14
1931.....	2.08	2.00	1.84	1.68	1.48	1.34	1.532	1.67	1.75	1.74	1.71	1.42
1932.....	1.43	1.44	1.32	1.17	1.05	.89	.98	1.07	1.11	1.12	1.18	1.08
1933.....	.97	.95	.85	.87	1.03	1.17	1.33	1.56	1.51	1.41	1.52	1.46
1934.....	1.44	1.43	1.35	1.30	1.28	1.33	1.42	1.51	1.40	1.44	1.64	1.69
1935.....	1.66	1.67	1.68	1.62	1.44	1.32	1.33	1.40	1.42	1.52	1.78	1.79
1936.....	1.76	1.76	1.62	1.50	1.39	1.40	1.57	1.87	1.80	1.75	1.96	1.79
1937.....	1.74	1.73	1.57	1.43	1.29	1.25	1.46	1.61	1.75	1.85	2.27	2.25
1938.....	2.01	1.85	1.65	1.36	1.19	1.13	1.16	1.20	1.73	1.81	2.15	1.95
1939.....	1.82	1.70	1.24	.99	.92	1.01	1.42	1.88	2.00	2.21	2.22	-----

¹ Source: L. Spencer, Cornell University, Ithaca, N. Y. (Prices for 3.7-percent milk converted to 3.5-percent basis.)

TABLE VII.—*Monthly average prices paid by condenseries for 3.5-percent milk (f. o. b. factory), United States, 1921-39*¹

[Dollars per 100 pounds]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1921	2.13	2.07	2.11	2.23	1.96	1.61	1.59	1.87	1.87	1.89	1.94	1.85
1922	1.70	1.53	1.50	1.48	1.45	1.45	1.60	1.71	1.75	1.86	2.08	2.31
1923	2.40	2.37	2.31	2.22	2.04	2.02	2.12	2.16	2.18	2.23	2.21	2.21
1924	2.18	2.13	2.09	1.93	1.72	1.64	1.66	1.66	1.66	1.70	1.71	1.85
1925	1.92	1.93	1.93	1.93	1.88	1.82	1.91	1.98	2.01	2.09	2.15	2.15
1926	2.17	2.06	2.03	1.93	1.81	1.79	1.79	1.84	1.95	2.00	2.09	2.22
1927	2.28	2.28	2.20	2.14	2.00	1.91	1.91	2.00	2.07	2.15	2.20	2.25
1928	2.27	2.22	2.08	2.05	1.97	1.92	1.96	2.67	2.16	2.19	2.21	2.28
1929	2.23	2.18	2.14	2.07	1.99	1.92	1.91	1.96	1.97	2.04	2.07	2.02
1930	1.87	1.71	1.69	1.68	1.67	1.58	1.54	1.61	1.72	1.75	1.67	1.56
1931	1.42	1.35	1.27	1.21	1.12	1.04	1.02	1.03	1.12	1.22	1.23	1.19
1932	1.12	.99	.95	.93	.86	.81	.77	.80	.85	.86	.86	.92
1933	.95	.84	.82	.81	.93	1.00	1.07	1.10	1.09	1.10	1.08	1.00
1934	.97	1.10	1.11	1.02	1.06	1.09	1.09	1.21	1.17	1.20	1.32	1.35
1935	1.46	1.57	1.42	1.46	1.23	1.13	1.13	1.18	1.22	1.31	1.49	1.57
1936	1.58	1.62	1.47	1.40	1.29	1.39	1.63	1.74	1.74	1.65	1.64	1.62
1937	1.59	1.58	1.63	1.49	1.43	1.42	1.46	1.52	1.61	1.65	1.71	1.71
1938	1.53	1.42	1.36	1.24	1.17	1.15	1.16	1.15	1.14	1.16	1.21	1.26
1939	1.20	1.18	1.11	1.07	1.10	1.13	1.16	1.18	1.35	1.43	-----	-----

¹ Source: U. S. Department of Agriculture. Statistical Bulletin 25, p. 174; Handbook of Dairy Statistics¹ 1933, p. 50; Agricultural Statistics, 1939, p. 386.TABLE VIII.—*Premium of dairymen's league price over United States condensery price, 1921-39*¹

[Cents per 100 pounds]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1921	125	71	18	7	-5	1	31	48	57	78	68	74
1922	61	64	30	6	5	10	22	25	45	55	58	64
1923	1	14	2	6	-2	10	6	12	22	29	32	14
1924	-6	-11	-9	2	-12	-10	-4	18	38	36	75	76
1925	70	57	53	41	21	18	14	32	41	42	46	48
1926	42	45	39	39	33	22	36	52	61	58	63	58
1927	39	39	40	30	22	22	33	42	68	73	82	74
1928	63	58	40	20	19	14	32	56	62	70	87	76
1929	78	79	69	54	40	35	45	61	81	84	90	72
1930	75	80	73	58	30	26	44	73	92	81	87	58
1931	66	65	57	47	36	30	50	64	63	52	48	23
1932	31	45	37	24	19	8	21	27	26	26	32	16
1933	2	11	3	6	10	17	26	46	42	31	44	46
1934	47	33	24	28	22	24	33	30	23	24	32	34
1935	20	10	26	16	21	19	20	22	20	21	29	22
1936	18	14	15	10	10	1	-6	13	6	10	32	17
1937	15	15	-6	-6	-14	-17	0	9	14	20	56	54
1938	48	43	29	12	2	-2	0	5	59	65	94	69
1939	62	52	13	-8	-18	-12	26	70	65	78	-----	-----

¹ Computed from tables VI and VII.

TABLE IX.—*Total milk production and number of milk cows, New York State, 1925-39*¹

Year	Milk produced during year (million pounds)	Number of milk cows on Jan. 1 (thousand head)	Year	Milk produced during year (million pounds)	Number of milk cows on Jan. 1 (thousand head)
1925.....	6,995	1,383	1933.....	7,297	1,438
1926.....	7,082	1,349	1934.....	6,983	1,416
1927.....	7,146	1,300	1935.....	6,956	1,321
1928.....	7,216	1,306	1936.....	7,188	1,347
1929.....	6,973	1,306	1937.....	7,392	1,374
1930.....	7,068	1,330	1938.....	7,424	1,395
1931.....	7,367	1,370	1939.....	7,465	1,423
1932.....	7,340	1,411			

¹ Source: United States Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service, Annual Livestock Reports.

TABLE X.—*Percentage of milk receipts in New York metropolitan area originating in each of 4 States*¹ and percentage of milk received at the New York market by truck² 1927-38

Year	Percentage of milk receipts (truck and rail) originating in—						Percentage received by truck
	New York	Pennsylvania	New Jersey	Vermont	Other States	Total	
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
1927.....	78.8	10.5	7.2	2.5	1.0	100.0	2.1
1928.....	77.3	12.6	6.3	3.0	.8	100.0	2.5
1929.....	75.6	13.8	5.8	3.7	1.1	100.0	3.5
1930.....	75.5	13.9	5.9	3.4	1.3	100.0	5.9
1931.....	72.6	15.6	6.5	3.7	1.6	100.0	9.5
1932.....	69.4	15.8	8.5	4.5	1.8	100.0	17.4
1933.....	67.7	16.3	10.1	4.2	1.7	100.0	32.2
1934.....	66.1	17.4	10.9	3.9	1.7	100.0	36.5
1935.....	63.1	18.8	11.7	4.6	1.8	100.0	45.8
1936.....	63.4	18.2	11.4	5.0	2.0	100.0	³ 45.5
1937.....	65.8	16.8	10.9	4.9	1.6	100.0	³ 49.1
1938.....	67.6	15.6	11.5	3.7	1.6	100.0	³ 53.3

¹ State of New York, Department of Agriculture and Markets Circular 584, table 8, p. 147.

² Cornell University, Agricultural Experiment Station Bulletin 655, table 19, p. 22.

³ Estimated.

TABLE XI.—Receipts ¹ of milk at New York City market, 1921-39 ²

[Thousands of 40-quart units]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1921.....	1,978	1,857	2,143	2,111	2,289	2,414	2,427	2,230	2,262	2,155	1,853	2,012
1922.....	2,051	1,908	2,209	2,156	2,479	2,475	2,412	2,303	2,233	2,285	2,133	2,154
1923.....	2,170	2,002	2,295	2,297	2,550	2,746	2,589	2,479	2,411	2,403	2,282	2,335
1924.....	2,363	2,237	2,470	2,396	2,577	2,637	2,684	2,646	2,501	2,550	2,403	2,434
1925.....	2,412	2,281	2,603	2,500	2,676	2,902	2,761	2,673	2,647	2,587	2,496	2,546
1926.....	2,522	2,320	2,639	2,629	2,778	2,776	2,851	2,773	2,681	2,712	2,547	2,631
1927.....	2,714	2,531	2,891	2,780	2,926	2,965	3,031	2,833	2,854	2,941	2,780	2,774
1928.....	2,811	2,677	2,926	2,809	3,010	2,968	3,125	3,002	2,914	3,001	2,798	2,847
1929.....	2,881	2,654	2,995	2,876	3,056	3,175	3,104	2,979	3,019	3,032	2,925	2,914
1930.....	3,072	2,802	3,057	2,953	3,247	3,110	3,124	2,928	3,126	3,106	2,965	2,980
1931.....	2,942	2,692	2,966	2,864	3,059	3,090	3,232	3,034	3,013	2,984	2,805	2,854
1932.....	2,879	2,742	2,944	2,809	3,007	2,943	3,021	2,905	2,910	2,812	2,697	2,762
1933.....	2,826	2,563	2,795	2,735	2,933	2,876	2,767	2,793	2,694	2,783	2,622	2,654
1934.....	2,614	2,411	2,692	2,585	2,780	2,773	2,762	2,595	2,583	2,653	2,573	2,542
1935.....	2,577	2,304	2,642	2,632	2,788	2,760	2,764	2,691	2,682	2,741	2,648	2,734
1936.....	2,797	2,611	2,863	2,766	3,003	2,866	2,928	2,876	2,826	2,874	2,789	2,848
1937.....	2,890	2,674	2,995	2,954	3,202	3,225	3,111	3,077	3,003	3,132	2,989	2,979
1938.....	2,992	2,730	3,031	2,876	2,984	3,041	3,010	3,184	2,899	3,019	2,965	2,957
1939.....	3,097	2,813	3,139	3,042	3,317	3,368	3,246	3,179	3,068	3,217	3,046	3,079

¹ Total truck and rail receipts.² Source, 1921-33: Cornell University, Agricultural Experiment Station Bulletin 655, p. 49. 1934-36: New York State Department of Agriculture and Markets. Circular 534, 1936, p. 34. 1937: New York State Department of Agriculture and Markets Circular 84, 1938, p. 149. 1938-39: United States Department of Agriculture, Bureau of Agricultural Economics and Agricultural Marketing Service, Annual Summary of Dairy and Poultry Statistics, 1938, p. 20, and 1939, p. 21.

NOTE.—For retail price data see table III, accompanying figure 1.

TABLE XII.—Index numbers of factory pay rolls, State of New York, 1923-39 ¹

[1925-27=100]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1923.....	100.6	100.4	106.9	107.0	108.4	108.3	106.4	103.8	105.4	108.0	106.1	106.1
1924.....	104.2	104.9	106.9	101.8	97.1	93.3	89.2	90.4	96.1	95.5	96.0	98.8
1925.....	98.4	99.0	101.8	97.1	97.3	96.1	95.2	98.2	99.2	102.0	103.0	105.0
1926.....	104.2	103.2	105.1	102.9	100.2	100.8	97.8	98.8	102.7	104.1	102.0	102.2
1927.....	100.4	101.3	103.1	99.6	98.1	97.9	95.5	97.4	100.3	99.4	95.8	96.8
1928.....	93.6	94.4	96.4	92.4	92.8	94.0	92.1	94.0	97.1	99.3	98.6	99.6
1929.....	97.6	101.3	104.4	102.9	101.9	101.9	100.9	102.3	105.5	104.7	100.4	97.1
1930.....	94.7	93.2	94.4	91.4	88.7	86.7	82.1	81.6	84.5	80.4	76.3	73.7
1931.....	70.4	72.6	75.1	72.9	70.4	66.7	65.5	65.0	66.5	62.3	59.4	57.8
1932.....	54.6	53.9	53.8	50.1	44.9	42.6	39.4	41.1	44.9	46.4	44.2	42.6
1933.....	40.0	40.7	38.4	40.1	42.4	45.1	47.9	51.0	55.0	54.1	51.8	51.3
1934.....	51.8	54.7	58.3	59.0	58.2	57.0	55.7	56.9	57.3	57.2	56.1	58.0
1935.....	58.3	60.9	63.1	62.9	61.2	60.2	59.5	62.5	65.9	66.3	64.3	65.9
1936.....	64.4	64.5	67.2	66.4	66.6	66.3	67.5	71.0	72.3	75.2	75.1	79.1
1937.....	78.8	81.1	86.1	86.5	86.4	86.4	84.9	87.2	86.5	84.8	76.7	74.2
1938.....	68.9	70.6	70.6	67.4	64.2	63.7	64.9	70.0	75.3	75.0	72.9	75.8
1939.....	74.4	76.8	79.4	76.4	74.4	75.9	75.8	80.2	82.4	87.4	87.8	89.3

¹ Monthly survey of current business. Compiled by New York State Department of Labor. (Unadjusted for seasonal variation.)

PART III

PRICE FIXING IN THE BITUMINOUS COAL INDUSTRY

By

ELLERY B. GORDON AND WILLIAM Y. WEBB

SUMMARY

Peacetime public control of prices in the bituminous coal industry is of recent origin and is related to the depression which has characterized this industry since about 1923. Prior to the first World War the bituminous coal industry enjoyed continuous and prosperous expansion in step with the industrial growth of the country. Protective tariffs, beginning in 1789, and regulations governing the leasing of public lands containing coal deposits represented the principal types of Government intervention in this industry.

During the years 1917-20 the Federal Government fixed maximum prices of coal in order to protect itself and other consumers from excessive price increases under war influences. Chaotic post-war conditions in the early twenties, marked by falling prices, transportation difficulties, labor disputes, and strikes led to creation of the office of the Federal Fuel Distributor to gather information on production and needs, and cooperate with the Interstate Commerce Commission in priority control. Conditions in these years also produced several bills in Congress providing for coal embargoes, seasonal freight rates, Government storage piles, Government purchase and sale of coal, Government price fixing, and Government operation of the mines in an emergency.

When the transportation and labor difficulties of the first post-war years disappeared, it became evident that expansion of mine capacity under the influence of war demand had left the bituminous coal industry with large overcapacity relative to the normal demands of the middle twenties. During the ensuing period of general business prosperity overcapacity in bituminous coal was not substantially reduced, owing to increasing fuel efficiency and the growing competition from oil and gas. As a result, even before the advent of the depression of the early 1930's, the coal industry had begun to suffer a severe depression of its own, characterized by a cumulative process of price cutting and wage cutting which became more intense as the years went on.

Whereas most bills introduced prior to 1928 had the general purpose of protection of consumers, bills began to appear in 1928 which were designed to protect coal labor and operators against the results of unrestricted competition by such devices as consolidation, marketing agencies, and Government establishment of minimum prices.

The depression in the coal industry was, of course, intensified by the general business depression. Wage rates, employment, and working time declined to very low levels during the early 1930's, while operators' losses multiplied. Annual deficits ranging from seven to fifty million dollars have occurred in each year since 1927. Government control was urged more strongly than before, both by labor and by coal operators.

The N. R. A. code for bituminous coal contained stipulated minimum wages and maximum hours which had previously been determined through collective bargaining for inclusion in the code. The

code authorities for the five producing areas into which the country was divided fixed minimum prices for coal.

After the N. I. R. A. was declared unconstitutional Congress passed the Bituminous Coal Conservation Act of 1935. Minimum wages and maximum hours negotiated by collective bargaining were made binding on all producers in a district when approved by producers of more than two-thirds of the annual tonnage of the district and by representatives of a majority of the mine workers. Minimum prices might be fixed by district boards of producers when approved by the National Bituminous Coal Commission created by this act. The Commission was empowered to fix maximum prices when necessary for protection of consumers.

In May 1936, before fixed prices became effective under this law, it was declared unconstitutional on the basis of its provisions for minimum wages and maximum hours. Thereupon Congress passed the Bituminous Coal Act of 1937, empowering the Coal Commission to prescribe minimum and maximum prices for coal and marketing rules and regulations, and to penalize certain unfair methods of competition. This law contains no provisions relative to fixing of wages and hours of labor. Its purposes are stated by Congress to be as follows:

That regulation of the sale and distribution in interstate commerce of bituminous coal is imperative for the protection of such commerce; that there exist practices and methods of distribution and marketing of such coal that waste the coal resources of the Nation and disorganize, burden, and obstruct interstate commerce in bituminous coal, with the result that regulation of the prices thereof and of unfair methods of competition therein is necessary to promote interstate commerce in bituminous coal and to remove burdens and obstructions therefrom.

Although not specifically mentioned here or elsewhere in the law, the history of this act, and on earlier legislation to regulate coal prices, indicates that the primary purpose of the Bituminous Coal Act of 1937 was the establishment of minimum prices in order to insure the ability of the coal operators to pay wage schedules negotiated by collective bargaining. Other purposes were to remove or diminish operators' losses and to prevent practices that had a tendency to intensify depression in this industry. The interest of consumers is recognized in the act by the creation of the office of the Consumers' Counsel in the Department of the Interior to represent them.

The standards for minimum price fixing provided by the act to attain these ends may be divided into two classes—first, the cost standard, which is quite specific and definite, and second, a set of standards which are expressed in general terms.

The cost standard is as follows: In each of the 10 price areas designated by the act the general level of minimum coal prices is to be set so that the average realization per ton will be equal to the weighted average cost of production of all the coal produced in that area. The items to be included in cost, which are specified by the act, cover most elements of operating expense, but no return on capital investment.

The other factors to be considered in setting minimum prices are stated in general terms. These considerations apply particularly to the structure of relative prices for different kinds, qualities, and sizes of coal and prices of the same coal for different uses; they also apply to intercompany and interdistrict price relations. Minimum prices must be "just and equitable" between producers and between pro-

ducing districts; "shall have due regard to the interests of the consuming public"; "shall reflect, as nearly as possible, the relative market values" of different coals, "taking into account values as to uses, seasonal demand, transportation methods and charges and their effect upon a reasonable opportunity to compete on a fair basis, and the competitive relationships between coal and other forms of fuel and energy"; and are to "preserve as nearly as may be existing fair competitive opportunities." It is evident that the specific content of these standards will be developed and be made evident to the public only through administration by the regulatory agency and interpretation by the courts. From the price hearings already held, it is clear that these standards have been given different content in different areas and different competitive situations. The way in which these standards are interpreted will have great influence in the long run on the economic position of the industry and various factors within the industry.

As the national defense program gets under way in the summer of 1940, another provision of the Coal Act, that for fixing maximum prices, assumes potential importance that was hitherto lacking. According to the act, the regulatory agency may establish maximum prices in order to protect consumers "against unreasonably high prices." Maximum prices may be—

established at a uniform increase above the minimum prices in effect * * * so that in the aggregate the maximum prices shall yield a reasonable return above the weighted average total cost of the district: *Provided*, That no maximum price shall be established for any mine which shall not yield a fair return on the fair value of the property.

It will be noted that no criteria are given in the act for the amount of the "uniform increase above the minimum prices in effect." Secondly, it is evident that the proviso concerning a "fair return on the fair value of the property" renders effective regulation of maximum prices in this industry practically impossible even in an emergency. In order to comply with the law the Coal Division would have to make valuations of the properties of all the operating coal mines, a tremendous and lengthy task. Until Congress and the courts find a less cumbersome and time-consuming method of affording the coal companies their constitutional protection against deprivation of property, effective maximum price fixing in the coal industry will be impossible.

The Coal Act of 1937 created the National Bituminous Coal Commission in the Department of the Interior to administer the provisions of the act. On July 1, 1939, the President's Reorganization Plan No. II abolished the Commission and transferred its functions to the Bituminous Coal Division of the Department of the Interior. The Coal Division operated under a single executive, the Director, who is responsible to the Secretary of the Interior. In this report the term "Commission" is often used in a general sense to refer to the administrative agency—that is, to the Coal Commission prior to July 1, 1939, and to the Coal Division thereafter.

In the winter of 1937-38 the Coal Commission established minimum prices without having conducted public hearings. Legal difficulties ensued and the Commission withdrew the minimum prices within a few weeks. Thereafter it embarked upon an exhaustive process of study and lengthy public hearings which lasted until January 1940.

imum prices recommended by the trial examiners for establishment were announced in the spring of 1940. After oral arguments on these prices the Division began preparation of its final findings which, it was expected, would be issued in July, whereupon minimum prices would be promulgated.

In common with the other reports on governmental price control presented in this monograph, this report on coal is addressed to the nature of the economic standards for price fixing in their relation to three problems: (1) The general level of prices in the industry; (2) the pattern or structure of relative prices in the industry, i. e., the prices of the various kinds, qualities, and sizes of coal and prices of the same coal for different uses; (3) the relation between prices in this industry and the level of use of resources in the economic system.

The present report treats the following topics:

(1) A short history of the development of the bituminous coal industry in the United States, the economic problems of this industry, and the course of governmental control prior to the act of 1937.

(2) A description of the provisions of the act of 1937 with special reference to the economic standards and the procedures for price fixing laid down by the act.

(3) A discussion of and appraisal of the cost standard for the level of minimum prices in each price area, including some of the possible results of the application of this standard. Unlike most of the other provisions of this act relating to price fixing, the cost standard is set forth in such definite terms that some appraisal is possible. With regard to the other provisions for price fixing, everything seems to depend on interpretations by the regulatory agency and the courts. With respect to the cost standard, the range of interpretation open to the regulatory agency is sufficiently limited that some possible effects of the application of this standard can be analyzed even before minimum prices are finally established. According to the Coal Division the minimum prices to be established in the summer of 1940 will be about the same in some price areas and for some coals and somewhat higher in other price areas and for some coals than the unregulated market prices prevailing in recent years.

In each area where the level of minimum prices must be raised above previously prevailing prices in order to satisfy the cost standard required by the act the Coal Division has endeavored, as far as feasible, to raise prices on those particular coals and in those particular markets where substitution of competing fuels would not ensue or would be kept at a minimum. As a result, price increases in some areas may not be followed by any decline in coal consumption, whereas declines may occur in other areas unless the tendency to substitution of other energy resources is offset by repercussions of the national defense program on the demand for coal and on the demands for and prices of oil and gas.

Price fixing according to the cost standard should have a tendency to minimize ruinous price and wage cutting for a time at least. It is likely that the prohibition of price competition will lead to increased competitive expenditures on marketing and various services. An increase in mechanization may occur as a result of the greater opportunity for profits afforded by this standard.

The act requires readjustment of minimum prices to accord with established changes in average cost, other than those of a seasonal

nature. Average costs, however, usually increase as demand and production decline, and, at a time when other prices are likely to be falling, minimum coal prices, under this act, would probably have to be adjusted upward. Further, a change in prices, following a change in average cost, may cause a change in consumption and hence in production, which in turn produces another change in average cost, requiring a further change in the level of minimum prices. If not counterbalanced by other factors, such changes might operate for some time in the same direction—e. g., an increase in cost, an increase in prices, a drop in consumption and production, a further increase in costs, a further increase in prices, and so on. It is quite possible that application of the rigid cost standard set by this act through depression and recovery may result in a tendency for coal prices to rise in depression and fall in recovery, with a consequent loss of markets (not always to be regained) in depression periods. Moreover, owing to the length of time required to demonstrate cost changes under this act, readjustment in the level of minimum prices will follow changes in cost only after a considerable lag.

(4) An explanation of the other considerations which are to be taken into account in fixing minimum prices and of the difficult economic and administrative problems facing the regulatory agency in the task of giving specific content to them.

(5) A sketch of some proposals regarding Government control of bituminous coal which, in the judgment of the authors, would produce a more desirable balance of interests of all connected with this industry than is possible with the present act as it now stands. The authors conclude that control of the general type embodied in this law is desirable, but that the process of price fixing should be made more flexible and less lengthy and that the powers of the regulatory agency should be extended, especially to include control of production.

It should be emphasized that the present report does not attempt a full appraisal of the probable results of this act and its administration. For several reasons this was impossible. As has already been pointed out, most of the considerations for price fixing, other than the cost standard, are stated in such general terms that specific content can be given to them only through the work of the regulatory agency and the courts. Study of the record of the hearings for price area 1 (in which 70 percent of the bituminous coal output in the United States is produced) and of the examiners' findings for all price areas does not indicate that the regulatory agency has yet announced its complete interpretations of these generally worded provisions of the act. The final findings of the Coal Division were not completed at the time of completion of this report. Again, no prices had been formally established by the Coal Division at the time of completion of this report. The period of more than 3 years elapsing between enactment of the law and actual establishment of minimum prices is at once a reflection of the difficulties of administering this law, an expression of the great interest in coal price fixing under this law on the part of all persons connected with the industry—the hearings covered about 130 volumes—and of the opportunities for legal delay, and a tribute to the painstaking care shown by the present administrative agency. Thirdly, since no prices had been fixed, it was impossible to attempt any study of actual minimum prices fixed under this law as compared with prevailing prices in any previous period.

Finally, the bulk of this report was originally finished in the early winter of 1939 before completion of the whole record of hearings and examiners' findings—in short while the process of price fixing was, in the words of the Coal Division, in "midstream." The report is based principally on the record for districts 1 through 8, comprising price area 1. Study of this district gives a picture of the general problems of regulation as well as the particular problems in these producing districts. Study of the record for the other districts is, of course, necessary for understanding of problems peculiar to them. Additions to and revisions of the report have been made after study of the examiners' findings which became available subsequent to original completion of the report.

In the light of the foregoing it will be readily understood that this report makes no attempt to constitute a complete guide to public policy with respect to control of the bituminous coal industry. For judgment of this important question, which will face the Congress on expiration of the present Coal Act in April 1941, a study of the forthcoming final findings of the Coal Division is obviously indispensable. There is being submitted with this report that portion of the final findings of the Director of the Bituminous Coal Division which relates to the general problems of fixing minimum prices under the act. The present report attempts mainly to supply a brief description of the economic problems of the bituminous coal industry and of earlier experience with governmental control in this industry, an exposition of the chief provisions of the act of 1937 and of some of the principal problems encountered in its administration, an appraisal of the one standard set forth in specific terms by the act—the cost standard for the general level of minimum prices—and some suggestions looking toward an improved "way of order" for this distressed industry. A comprehensive study of all the facets of public regulation of bituminous coal prices would require not only the experience which only the lapse of several years can provide, but also more time for study than was available for the preparation of this report.

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CHAPTER I

ECONOMICS OF THE BITUMINOUS COAL INDUSTRY IN REVIEW ¹

GENERAL CONDITIONS

About one-half of the known coal resources in the world lie within the boundaries of the United States, and practically all are privately owned. These reserves are sufficient to supply the annual needs of our country for hundreds of years, measured by the present demand. The present problem is largely due to the efforts of private owners to turn into current assets investments made burdensome by taxes and carrying charges on investments in the coal lands. The result has been the development of excess capacity for production, bitter intersectional competition, degradation of labor, large annual losses, and many other uneconomic practices.

Before reviewing the industry's history during this century, we should like to point to certain conditions typical of this industry, and different from most other industries:

1. The cost of producing coal is very largely dictated by the geologic and other physical conditions within the mine. Unlike manufactured products, the cost of producing the coal is not directly related to the quality of the coal produced.

2. The number of working days available in a year is limited in coal mines by several factors. Production is more immediately responsive to consumer demand than in many industries. There is very little storage space at mines, and as a rule when orders for shipment are not available, the mine faces a shut-down. Ordinarily consumers and dealers do not stock more than 30 to 40 days' supply of coal. (One exception is the upper Great Lakes docks, which stock important tonnages during the lake shipping season, to be drawn upon while the lakes are frozen over.) The business is seasonal at best.² The periods of seasonality are not the same in all producing districts.² In only one district is operating time likely to run fairly uniform throughout the months of the year. This is in the so-called smokeless coal fields of West Virginia, known under the act as district No. 7.² Mining hazards are also responsible for lost operating days, since any accidental fatality will close the mine down for at least the balance of the day. A break-down in the ventilating system or the power supply necessitates shutting down. Days of working time are thus lost every year due either to "no market" or a break-down or accidents. Then, too, hardly a year goes by

¹ For a comprehensive review in considerable detail, see F. E. Berquist & Associates, *Economic Survey of the Bituminous Coal Industry Under Free Competition and Code Regulation* (Works Material No. 69, N. R. A. Division of Review). A more condensed version can be found in pt. II of the brief of the National Bituminous Coal Commission in *Ex Parte 118* before the Interstate Commerce Commission, beginning at p. 2; an annual review in great statistical detail will be found in the *Minerals Year Book* of the United States Bureau of Mines.

² See table on pp. 239-240.

without either a number of local strikes or sometimes a serious sectional or Nation-wide strike. The latter usually occur at the termination of a wage agreement.

3. Mine labor is in an economic and social position quite different from that in the general run of manufacturing, transportation, and distribution industries. Not only are the earnings of the miners limited by the available number of working days and therefore of the possible output in a year (they are paid on a time and piece work basis), but miners and their families very largely live in isolated mining towns or very small towns principally dependent upon the mines operating. When their opportunity for earning is suspended for either a short or an extended period, there is practically no other available work to which they can turn. This is not so true for those who live near large cities, but they do not represent the larger proportion of the total number. Thus, a large number of mine employees, varying from 100,000 to 300,000 during the ups and downs of the long depression of the coal industry, which began in 1924, face, and many of them have faced for some years, insufficient employment or permanent unemployment so far as the mines are concerned. Without assistance in locating and rehabilitating themselves, they probably face some sort of permanent dole. The first Guffey bill, as originally introduced early in 1935, made specific provision for the rehabilitation of miners with no hope of future reemployment in the coal industry. This provision was stricken by the Senate committee.

The bituminous coal industry occupies a strategic position in the economic life of the Nation.

The families of over one-half million workers represent well over 2,000,000 people who depend upon this industry for a livelihood; transportation and distribution services raise this number very materially. Millions of our population rely upon an unfailing supply for heat, both in homes and offices; railroads consume around 20 percent of the total; industry operates very largely upon the energy derived from coal.³

Consequently, the conservation of our coal resources, along with oil, natural gas, and other sources of energy, has long been recognized as a matter for national policy. About 2 percent of the original bituminous coal reserve, and 25 percent of the anthracite, has been exhausted. About one-seventh of these reserves lie in the superior eastern coal regions, but one-half of the total American reserve is in inferior subbituminous and lignite fuels, located in the western part of the country far from present centers of population. The bulk of the coal reserve consists of relatively thin or inaccessible seams which are more difficult to mine. Exhaustion of only 25 percent of the anthracite beds of Pennsylvania, for example, has considerably increased the cost of mining. The same situation will develop in the relatively near future with respect to the bituminous seams which permit low cost mining. Thus the problem becomes one of increasing costs.

If the annual consumption of energy in the United States were to continue at the 1929 rate, and if it were assumed that coal will carry the load after the exhaustion of oil, gas, and oil shale, the coal reserves, after allowing for a loss of 30 percent in mining, preparation, and transportation (less than at present), might last 2,100 years.

Undoubtedly there will be an increase in the demand for energy. An increase at the rate which prevailed during the 1920's would cut

³ F. E. Berquist & Associates, op. cit., p. 13.

the period to some 500 years, and a shortage of supply would be felt in the Appalachian field within 100 years.

In these circumstances, it becomes important to conserve coal resources and to keep waste at a minimum. It is estimated that about 35 percent of the potentially marketable supply is lost in the process of mining, of which perhaps 20 percent is avoidable. Principal losses are in the structure of the room, entry, and pillars. Thus, any national policy with regard to coal must attempt to reduce these and other losses and encourage means of conservation, which, as defined by the National Resources Committee, is an—

orderly and efficient use in the interest of national welfare, both in war and peace, without unnecessary waste either of the physical resources themselves or of human elements involved in their extraction.⁴ The problem of conservation, therefore, is not one of absolute exhaustion centuries hence but of increasing cost at a relatively early date. In practical terms, it is to maintain the life of the good beds as long as reasonably possible by prevention of needless waste, thereby postponing the resort to thinner and less accessible beds. As exhaustion of the best beds is already a fact in some districts, the problem is immediate and urgent.⁵

It must be recognized, of course, that a complicating difficulty in this problem is the unavoidable fact that any comprehensive program of conservation will be attended by a substantial increase in basic costs.

The Board further defines the objectives of conservation in its report on National Planning and Public Works in Relation to Natural Resources:

The task before the Nation is to help these (natural resource) industries to prevent competitive waste, bring supply in balance with requirements, stabilize employment, limit cutthroat competition, and by achieving some measure of stability, permit the savings in the underlying resource which technology has already shown to be possible. It involves considering the control of production, of capacity, of stocks, and often of price by methods which traditionally have been thought forbidden by the antitrust laws. It involves recognition of the competition between mineral industries, as in the fuel and power group, as well as within them.

So far the attempt to meet this test has gone as far as production quotas in the petroleum industry,⁶ rate setting in the natural gas industry,⁷ and minimum prices in the bituminous coal industry.⁸

The attempt to further conservation is one of the declared purposes of the Bituminous Coal Act of 1937, and the Commission is specifically directed by this law to study this problem. It is doubtful whether the fixing of minimum prices according to the provisions of this act can, in itself, effectively promote conservation. This effort to fix prices, and to regulate various other aspects of the industry's operation, should, of course, be appraised in the light of the long-run objective of conservation of national resources, as well as with regard to its immediate effects.⁹

OVERCAPACITY IN THE INDUSTRY

In addition to the problems of national policy associated with the need for conservation of the coal supply, there is the basic difficulty

⁴ National Resources Board, *A Report on National Planning and Public Works in Relation to Natural Resources* (Government Printing Office, Washington, 1935), p. 392.

⁵ Rice, Fieldner, and Tryon, "Conservation of Coal Resources," paper No. 11, sec. 4, Third World Power Conference, 1936, Washington.

⁶ Petroleum Act, 49 Stat. 33 (Feb. 22, 1935); 50 Stat. 257 (June 14, 1937).

⁷ Natural Gas Act, Public. No. 688, 75th Cong. (June 21, 1938).

⁸ Public. No. 48, 75th Cong. (Apr. 26, 1937).

⁹ A more detailed discussion of the conservation of national resources is given in appendix G.

of present overcapacity of existing mines. This has led to price cutting, wasteful mining and marketing, pressure upon labor costs, and a degree of disorganization of the industry, which gave impetus to the Bituminous Coal Acts of 1935 and 1937, embodying the principle of minimum price regulation by the Federal Government.

At present, largely on a single shift basis, it is conservatively estimated that the mines can produce one-third to one-half again as much coal as was produced and sold in 1937, the recent peak year of operations, without adding extra shifts beyond those scheduled in 1937 or bringing new or abandoned mines into use. This assumes a working year of 261 days, estimated on the basis of operations for 5 days a week in each of 52 weeks, with a maximum workday of 7 hours, as required by the wage agreement of April 1934. Using this basis, the mines which in 1937 produced 445,000,000 tons could have produced in 261 days, at the same daily rate, with existing labor forces, and all other factors being unchanged, 601,000,000 tons, or 156,000,000 tons more than the actual production. This is an excess of almost one-third over the actual demand. To produce this 601,000,000 tons would have required generally only one shift per day, although some of the mechanized mines in 1937 operated two or even three shifts.

If in producing this tonnage there had been none of the usual seasonal fluctuation, the monthly production would have been about 50,000,000 tons. As a matter of fact, March, the peak month of 1937, saw a production of 51,935,000 tons, indicating the ready capacity to produce at that rate. The seasonal nature of the demand for coal and the absence of storage facilities to permit more regular operations mean that there will always be added seasonal loads. Moreover, the peaks in all districts do not occur in the same months, as illustrated by the following table which shows that—

- (1) March was the peak month in price areas 1, 2, and 3;
- (2) in all price areas a summer slump is observable, except that, in price area 1, districts 2, 7, and 8 show peaks during some of the summer months, due largely to heavy shipments over the Great Lakes in the open shipping season. In district 2, where over 30 percent of total production is by captive mines largely owned by steel companies, and there is a heavy concentration of steel plants, the rate of operation by these steel plants exerts a decided influence on the monthly rate of production, apart from the influence of lake shipments;
- (3) district 7 enjoys what is for this industry a fairly even monthly production.

Thus, when the capacity necessary to meet the year's peak demand is considered, the estimated single shift capacity on the 1937 operating basis does not appear so excessive or so far beyond reasonable stand-by capacity. The probability of continued excess capacity for some time to come derives then from three conditions: First, the fact that current demand is not great enough even to utilize operating mines at capacity, with most mines operating on a single shift basis; second, the growing mechanization and the use of two or three shift operations in better situated mines; and third, the potentialities of widespread multiple shift operations and the more remote possibility of abandoned mines being brought into production.

TABLE 1.—Monthly production of coal in 1937, by districts, as defined in the Bituminous Coal Act of 1937 (in thousands of net tons) ¹

[Exclusive of warren and truck mines producing less than 1,000 tons a year]

Minimum price area and producing district	Total	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
PRICE AREA 1														
1. Eastern Pennsylvania ²	41,106	3,425	4,055	4,187	4,974	2,618	2,583	2,892	2,555	2,953	2,475	3,712	3,308	3,524
2. Western Pennsylvania	72,283	6,021	6,545	7,017	8,390	5,113	5,714	5,903	6,036	6,196	6,196	6,094	4,775	4,108
3. Northern West Virginia	24,010	2,001	2,248	2,563	2,884	1,560	1,861	1,912	1,770	1,838	2,452	2,004	4,775	4,108
4. Ohio	25,178	2,098	2,261	2,528	2,957	1,334	1,801	1,922	1,750	1,792	2,196	2,315	2,162	2,076
5. Michigan	4,562	47	80	84	10	10	10	13	18	26	32	59	60	68
6. Panhandle	4,203	350	349	405	476	303	315	365	315	320	332	338	325	336
7. Southern No. 1	54,275	4,523	4,481	4,559	5,639	3,812	4,040	4,273	4,560	4,826	5,014	9,047	4,168	3,879
8. Southern No. 2	91,874	7,657	6,953	7,111	9,954	6,457	7,536	7,327	7,184	7,500	8,050	8,687	7,513	7,128
Total, price area 1 ³	313,461	26,122	26,972	28,251	35,282	21,207	23,974	24,007	21,388	25,391	28,113	28,256	24,181	22,839
PRICE AREA 2														
9. West Kentucky	8,563	714	695	669	1,278	423	498	520	539	597	739	807	809	908
10. Illinois	31,602	4,360	5,665	5,769	6,967	2,114	2,239	2,674	2,639	3,230	4,377	5,080	4,897	5,651
11. Indiana	17,765	1,480	1,671	1,943	2,358	691	1,006	1,110	1,052	1,137	1,519	1,583	1,612	2,051
12. Iowa	3,637	363	499	504	542	78	97	90	115	217	317	369	332	437
Total, price area 2	81,567	6,797	8,560	8,905	11,145	3,306	3,842	4,394	4,645	5,181	6,562	7,789	7,721	9,127
PRICE AREA 3														
13. Southeastern	13,459	1,122	1,292	1,312	1,582	179	845	1,124	1,805	1,182	1,188	196	1,122	1,237
PRICE AREA 4														
14. Arkansas-Oklahoma	1,967	194	309	204	116	13	17	25	97	200	222	281	209	374

¹ The totals for the year are based on final complete returns to the National Bituminous Coal Commission from all operators known to have produced more than 1 000 tons a year. The apportionment of the known yearly total among the 12 months is based on the best information available; in some States, upon direct tonnage reports from operators to the State mine department in most cases, upon current records of the railroad carloadings and waterway shipments. Figures in italics indicate that production with respect to months exceeded the monthly average. This indicates the seasonality of production.

² Includes Maryland, and Grant, Mineral, and Tucker Counties, W. Va.

³ According to the act, minimum price area 1 includes the pay part of southeastern district 13 comprising Van Buren, Warren, and McKinn Counties, in Tennessee. Production here has been included in price area 3.

TABLE 1.—Monthly production of coal in 1937, by districts, as defined in the Bituminous Coal Act of 1937 (in thousands of net tons)—Continued														
Minimum price area and producing district	Total	Monthly average	January	February	March	April	May	June	July	August	September	October	November	December
{ PRICE AREA 5														
15. Southwestern:														
Bituminous coal	8,172	681	996	914	1,010	242	338	381	413	549	660	804	794	1,041
Lignite (Texas)	866	72	58	60	66	60	64	74	82	87	88	78	73	76
Total, price area 5	9,038	753	1,054	974	1,106	302	402	455	495	636	748	882	867	1,117
PRICE AREA 6														
16. Northern Colorado	2,510	299	884	291	292	100	90	94	88	100	192	249	286	544
17. Southern Colorado	5,515	400	647	619	672	255	338	327	320	368	534	654	600	576
18. New Mexico	884	74	97	101	99	72	51	63	63	60	51	69	73	69
Total, price area 6	8,909	742	1,128	1,011	963	427	479	484	471	528	718	852	859	989
PRICE AREA 7														
19. Wyoming	5,918	493	689	646	593	288	266	361	319	402	527	631	571	625
20. Utah	3,810	317	525	496	442	137	118	153	187	248	247	394	354	410
Total, price area 7	9,728	811	1,214	1,141	1,035	425	384	514	506	650	874	1,025	925	1,035
PRICE AREA 8														
21. North-South Dakota	2,298	191	380	322	303	91	63	60	58	79	186	304	292	310
PRICE AREA 9														
22. Montana	2,965	247	380	308	316	125	130	166	175	193	268	326	337	301
PRICE AREA 10														
23. Washington and Oregon	2,007	167	240	225	178	126	125	146	132	136	156	185	178	180
Alaska	132	11	9	8	9	12	10	13	12	11	13	14	8	13
Total, price area 10	2,139	178	249	233	187	138	135	159	144	147	169	199	186	193
Grand total, all areas ⁴	445,531	37,127	41,438	42,661	51,935	26,213	30,271	31,988	32,184	34,187	39,428	41,110	36,689	37,417

⁴ For purposes of historical comparison and statistical convenience the figures include the output of lignite. Note that no district organization has been created for district 21 North-South Dakota, the output of which is usually classified in the coal trade as lignite.

Source: Bituminous Coal Tables, 1937-38 (Department of the Interior, Bituminous Coal Division, July 1939), p. 16.

⁴ For purposes of historical comparison and statistical convenience the figures include the output of lignite. Note that no district organization has been created for district 21 North-South Dakota, the output of which is usually classified in the coal trade as lignite.

Source: Bituminous Coal Tables, 1937-38 (Department of the Interior, Bituminous Coal Division, July 1939), p. 16.

The only limitation upon mines generally operating two shifts and three shifts, thereby almost doubling and tripling capacity at 1937 rates, running production up to the fantastic figure of 1,800,000,000 tons, is, first, the inability of the present market to absorb even single shift capacity (601,000,000 tons), and secondly, the undoubted inability of present transportation equipment and railroad facilities to transport any such tonnage. In fact, when in the war years of 1917 and 1918 the production was pushed up to 550,000,000 and then to 580,000,000 tons, while just prior to that time the tonnage produced had been about that of 1936 and 1937 (445,000,000 tons), car shortages resulted. While a great improvement in the basis of car assignment to mines eliminated the recurrence of car shortages after 1922, it is still true that the ability of transportation agencies to handle a huge addition to tonnage, as produced, would be a limiting factor upon production. Just where it would begin to operate, whether at 500,000,000 tons or possibly nearer 700,000,000 tons, is not known. Much would depend on the extent of diversion of open-top cars to other uses. It is not unlikely that, even with new cars now in prospect, an annual production of somewhat over 500,000,000 tons, with peak weeks of 11,300,000 tons, might produce a shortage.

The capacity of present operating mines to produce for a full 261 day year on a daily three-shift basis is only theoretical; in fact, a full rate of production for two shifts would probably be impossible with present transportation facilities, even if sufficient labor were available.

Although it is not possible to indicate precisely the share of the annual output in 1937 which was due to extra shifts, it may be assumed for estimating purposes that the entire 20 percent of deep-mine output produced with mechanical loading was on a double-shift basis.¹⁰ On this assumption, a little over 80,000,000 tons were involved, or about 40,000,000 in each shift. Thus, of the stated 261-day capacity of 601,000,000 tons, representing about one-third over 1927 demand, about 40,000,000 tons may have been produced in extra-shift operation of deep mines. It is already known that strip mining is to a large extent an extra-shift operation. Thus the percentage of actual "excess" capacity is still further contracted.

No record is available to provide a dependable estimate of the additional capacity represented by hundreds of mines which have been

¹⁰ Coal Age (February 1939, p. 28) estimated that "25 percent of the deep-mined output was handled by some type of loading equipment" in 1938. In 1936 the proportion was 16 percent, and in 1937, 20 percent. See Bituminous Coal Tables 1937-38, Bituminous Coal Division (July 1939). An Information Circular of the Bureau of Mines points out that the use of mechanical equipment gives impetus to working two or three shifts in order to spread machine costs. Each shift in turn necessitates closer supervision and enhances the dangers associated with night shifts. See Multiple-Shift Mechanical Mining in Some Bituminous Coal Mines, Progress Report No. 1, by Albert L. Toenges and Robert L. Anderson (May 1938, pp. 47-48). This report states:

"The advent of mechanized mining has brought to the foreground, among many problems the matter of return of the increased investment in equipment. A mine is designed for a certain daily output, and if this is large, the investment in equipment and development will be large also. If, however, the daily output can be produced over a period of two or three shifts, the amount of equipment required will be reduced proportionately, which should result in a small capital charge per ton.

"There are other advantages of multiple shifting that have an influence on mining costs. The concentration of working places in a relatively small area lends itself to closer supervision. Satisfactory results with every type of mechanization, not only with reference to output per man but also in regard to safety of operation, are in proportion to the amount of supervision.

"The advisability of working a mine two or three shifts per day for obtaining maximum results is recognized, and this practice should be followed where possible. For safety of operation, however, the same supervision should be given on all shifts. It is the opinion of the authors that the same efficiency can be obtained from workers on the second shift as on the first or day shift if the same amount of supervision is given in both cases. However, there is a question in regard to a worker's efficiency on the third or 'graveyard' shift. The worker is in a much better condition psychologically and physically and is believed to be less susceptible to injury during the more natural working hours. Aside from the humanitarian standpoint, it is believed that this shift should be set aside for inspection and maintenance of machinery. If this is done there is less likelihood of serious break-downs on working shifts with resultant loss in tonnage and increase in cost."

closed down for perhaps several years but have been kept in readiness to operate whenever prices were such as to make operation advantageous.

This brief review of the meaning of excess production capacity brings out, first, that the physical ability to produce, with present equipment and labor working three shifts a day in all operating mines, is so far beyond the range of possible demand in the immediate future as to reduce its mere mention almost to the point of absurdity.

Nevertheless, subject to the need, and to the ability to transport, the mines do possess this capacity. For all practical purposes, however, we believe it fair to consider that the excess capacity is from one-third to one-half of the 1937 production, and apparently this is not so radically beyond the reasonable standby capacity. Nevertheless, it serves to exert pressure upon minimum prices.

HISTORY OF THE COAL INDUSTRY

The course by which the coal industry has reached its present rather disorganized condition is indicated in the historical review which follows. The history of the industry may be divided into five periods: The period prior to the World War of 1914, in which the industry grew rapidly; the war period—which laid the basis for later depression—a period marked by rapid expansion of capacity and output and employment, high prices, Government regulation by the U. S. Fuel Administration, and transportation difficulties; the chaotic post-war years through 1922, marked by rapidly falling prices, transportation difficulties, and labor disputes; 1923, a turning point; and the long depression, 1924–1933. With the year 1933 a new period of Federal regulation begins, by codes under N. R. A., and by direct Act of Congress with the so-called Bituminous Coal Acts of 1935 and 1937. This recent period of regulation is the principal subject of this study.

Growth of Industry Prior to the World War of 1914.

The bituminous coal industry kept pace with the gradual industrial expansion of this country, beginning about 1890. The Nation found its chief source of energy in bituminous coal. Annual production approximately doubled in each decade. In only 2 years, 1908 and 1914 was there any interruption to a steady upward climb of production and consumption. During the years 1900 to 1914 operating time held fairly constant, and the characteristic over-capacity held at about 50 percent of the production.

During the flush times of the decade preceding 1908, history in one important particular repeated itself. * * * The impulse to exploit new territory and to open new mines was rampant, notwithstanding the fact that there has not been a time during that period when, with a full complement of men, and with sufficient transportation facilities, the mines already developed have not been able to furnish from 50 to 75 percent more than the production. The opening of every new mine has, with rare exceptions, meant the further spreading out of an already inadequate supply of railroad cars, the laws prohibiting any favoritism in this respect.¹¹

Table 2 is a summary table of the prewar years showing production and average price data:

¹¹ *Mineral Resources of the United States* (Government Printing Office, 1908); Chapter on "Coal," pp. 5, 6.

TABLE 2.—*Production, capacity, average realization, and net income of the bituminous coal industry, 1890-1914*

Period	Production (millions of net tons)	Average number of days mines operated	Capacity in working year of 308 days (mil- lions of net tons) ¹	Percent production was of capacity	Average value f. o. b. mine (dollars per ton)	Net in- come or deficit (millions of dollars)
1890-94.....	121	208	181	66.85	\$0.97	-----
1895-99.....	156	205	233	66.91	.83	-----
1900-1904.....	252	221	350	72.00	1.11	-----
1905-9.....	353	212	513	68.81	1.10	(?)
1910-14.....	435	215	622	69.94	1.14	-----

¹ In the previous discussion of capacity in 1937, a 261-day year was used, based on a wage agreement of April 1934. In this table and all others in this chapter which relate to the period prior to 1934, a working year of 308 days is used. Thus, single-shift capacity figures for the periods up to and including 1933 and 1934 to date are not comparable.

² Data not available.

Source: Mineral Resources of the United States (United States Geological Survey).

It will be noted that operating mines worked an average of more than 200 days per year throughout the prewar period. The average number of days worked in a month or a year is perhaps the most important single factor directly affecting cost of production.

Growth of capacity during these prewar years cannot be attributed definitely to attractive profits. No definite figures of the aggregate profits in the industry are available, but some reflection of their trend may be had from the average sales realization and trend of wages. There was no appreciable upward trend in prices. Price realization per ton at the mine remained relatively constant from 1900 to 1914. It averaged \$1.11 in the first 5 years, \$1.10 in the second 5 years, and \$1.14 in the third 5 years. The maxima during this 15-year period were \$1.24 in 1903 and \$1.17 in 1914.

In this industry wages represent from 60 to 65 percent of the cost. Changes in wage rates are significant, therefore, as indicating the trend of labor costs, and hence of total costs. In 1900-1902, the union base scale for skilled labor in Illinois was \$2.28 per day; in 1903 it was \$2.56; in 1904-05 it was \$2.42; in 1906-09 it was \$2.56; in 1910-11 it rose to \$2.70; and in 1912-15 it reached \$2.85. With minor variations this schedule prevailed throughout the central competitive field (Illinois, Indiana, Ohio, and western Pennsylvania), which during this period accounted for about one-third of the national output. These changes in scale were reflected in the labor costs per ton, which increased from 70 cents to 78 cents on the total production between 1902-09.¹² Thus between those 2 years costs rose 8 cents, whereas average prices f. o. b. mines remained at practically the same level.

It is apparent that the opportunity for and range of profits were diminishing while capacity was growing apace. This condition of over-capacity had come to be accepted as a natural, if not a necessary, resultant under a "laissez faire" economic policy. The development was generally steady, and the industry was considered a profitable one. Capital was readily available. It is likely that hope of future profit was a potent motive. Railroads were glad to extend their facilities to new fields which offered freight revenue.

Mine labor has a long history of struggle marked by recurring suspensions, strikes, and lockouts incident to winning recognition

¹² Census of Mines and Quarries for 1902; same for 1909.

for collective bargaining and negotiation of wage agreements. Coal miners were generally considered a depressed group until the war. (During the war they received some increases, and by 1923 were working under very good rates of pay.) It must be borne in mind that there are two factors affecting the actual earnings of the mine worker. His earnings are controlled by the scale of wages under which he is employed and the number of days of work available to him in a year. For example, 705,000 mine employees in the bituminous coal industry worked 179 days in 1923; but while their average daily earnings of \$6.74 seems quite a fair daily wage, the average annual earnings were \$1,200. Similarly in 1929, 503,000 workers put in 219 days, and averaged \$5.34 a day for an annual total of \$1,168. The industry's private depression had reduced the number of employees by 200,000 and the average daily earnings by \$1.40. The general depression reduced employment to 419,000, who worked only 167 days, and made an average of only \$3.36 per day in the year 1933.¹³

War Period—Rapid Expansion.

Production was stepped up rapidly in 1916. An all-time peak of 579,000,000 tons was reached in 1918. New mines were opened, railroads extended to serve them, companies formed to operate them, and the foundation laid for the ruinous depression which followed 1923. In 1917 and 1918 the number of mines operating, the number of men employed, and the number of days of operation reached a high mark. During all the war years mines enjoyed very good working time. They operated 230 days in 1916, 243 in 1917, and 249 in 1918.

Under the stimulus of war activity and war prices, the number of operating mines increased from 5,726 in 1916 to 8,319 in 1918.

Average prices at the mines went from \$1.32 in 1916 to \$2.26 in 1917 and \$2.58 in 1918. Except for 1 year, they did not average over \$1.20 per ton before the war.

According to the Treasury Department, the aggregate net income of the bituminous coal industry in 1917 was about \$204,000,000. In 1918 it was almost \$149,000,000. This was the first official record of the aggregate net income of the industry.¹⁴

Table 3 gives the production and average price data for the war period.

TABLE 3.—*Production, capacity, average realization, and net income of the bituminous coal industry, 1916-18*

Year	Production (millions of net tons)	Average number of days mines operated	Capacity in working year of 308 days (mil- lions of net tons)	Percent production was of capacity	Average value f. o. b. mine (dol- lars per ton)	Net income or deficit (millions of dollars)
1916	503	230	673	74.74	1.32	(1)
1917	552	243	699	78.97	2.26	+204
1918	579	249	717	80.75	2.58	+149

¹ Data not available.

Source U. S. Geological Survey, Mineral Resources of the United States. Net income data from Report of the United States Coal Commission (1925).

¹³ These figures of earnings and employment are from a statement prepared by F. G. Tryon of the United States Bureau of Mines, appearing in Gordon Exhibit 697 in *Ex Parte* 115 before the Interstate Commerce Commission in 1936.

¹⁴ See Report of the United States Coal Commission (1925), p. 2528.

During each of these years, difficulties in railroad transportation and the supply of cars to the mines created actual shortages of coal among consumers, and developed among them fears for the adequacy of their supplies in the future. Consumer's demand could not be fully met in the fall of 1916 due to a car shortage which developed in October. In 1917, the rapid increase in production was at least partly responsible for an acute car shortage and a coal shortage. It was this which precipitated the formation of a committee on coal production within the Council of National Defense, followed by the establishment of the United States Fuel Administration under the Lever Act.¹⁵ The car shortage continued during the earlier months of 1918, and many will remember cases of actual suffering caused by a fuel shortage during one of the hardest winters on record.

United States Fuel Administration.

This war-time control of coal, extending to both bituminous coal and anthracite, as well as to petroleum, was the first experience in the country with governmental control of these industries.

During the early stages of the World War the production of bituminous coal had steadily increased, and the average realization f. o. b. mine remained relatively stable. There were rumors, however, of shortages of both labor and cars. Chief among those causes which led to the passing of the Food and Fuel Control Act,¹⁶ was the rapid rise in coal prices after the United States entered into the war in April 1917; the desire of the Government to buy its coal at moderate prices; the necessity of stimulating production to meet war-time needs; and the inability of transportation facilities to handle adequately the increased production of various commodities.

In June 1917, Franklin S. Peabody, chairman of the coal production committee, Council of National Defense, called together a group of bituminous coal operators to discuss voluntary maximum prices for coal. As the result of these meetings between the operators, Mr. Peabody, and the Secretary of the Interior, Mr. Franklin K. Lane, the operators agreed to a maximum price of \$3.50 for lump, egg, and nut sizes, and \$3 for mine run coal. These prices represented a considerable reduction inasmuch as prices at that time ranged from \$4 to \$6 per ton. Although the Government was permitted a reduction of 50 cents below these Peabody-Lane prices, Secretary of War Baker thought that the prices were much too high. The Secretary of the Navy required that the price submitted for an order of 1,700,000 tons for the Navy be reduced from the price of \$2.95 to \$2.335 a gross ton f. o. b. mine, with the understanding that the final price for this Navy order would be determined whenever the Federal Trade Commission had completed its investigation of cost of production.

The Peabody-Lane prices were generally observed, however, until the President's promulgation of maximum prices under the Lever Act.

The Lever Act (Food and Fuel Control Act of August 10, 1917) granted broad powers to the President, subject to the standards prescribed therein (and indicated herein by italics), to license the impor-

¹⁵ Public, No. 41, 65th Cong.; 40 Stat. 276 (Food and Fuel Control Act of Aug. 10, 1917).

¹⁶ Basic sources are the following reports of the U. S. Fuel Administration: Final Report of the U. S. Fuel Administration; Report of the Administrative Division; Report of the Distribution Division: Pt. I, "The Distribution of Coal and Coke," and pt. II, "The Zone System." Report of the Engineers Committee; Final Report of the Business Manager and the Custodian of Property; and General Orders, Regulations, and Rulings of the U. S. Fuel Administration. See also Paul W. Garrett's Government Control Over Prices (Government Printing Office, Washington, 1920).

tation, manufacture, storage, mining, and distribution of any necessities to effectuate the purposes of the act, to requisition fuels, and to take over and operate any mine, plant, factory, packing house, or oil pipe line necessary to any public use connected with the common defense. At the end of such use or operation, the mine, plant, factory, or pipe line was to be returned to its owner, and just compensation made by the President for the use thereof.

The act empowered and authorized the President to fix the price of coal and coke, wherever and whenever sold by producer or dealer, and to regulate the method of production, sale, shipment, distribution, apportionment, or storage of coal or coke, among dealers and consumers, both domestic and foreign, whenever in his judgment such action was necessary for the efficient prosecution of the war. The President was also authorized to requisition, take over, operate or cause to be operated, the plant, business, and all the appurtenances belonging to such coal or coke producer or dealer, whenever such dealer or producer failed to comply with prices or regulations, or conducted his business in a manner prejudicial to the public interest. While operating such plants or causing them to be operated, the President was also authorized to make such regulations for the employment, control, and compensation of the employees as to him seemed essential.

As an alternative, the President was authorized and empowered to establish a Government monopoly of the purchase, sale, and distribution of coal, whenever in his opinion such action was necessary for the efficient prosecution of the war.

On August 21, 1917, the President promulgated for all mines throughout the country a schedule of maximum f. o. b. mine prices. The base price was \$2.25 on prepared sizes, \$2 for mine run, and \$1.75 for slack and screenings in the eastern coal fields. The prices in the Mid-west and West were somewhat higher.

The President appointed Mr. Harry A. Garfield as United States Fuel Administrator, and delegated to him the powers conferred upon the President by the Lever Act. Mr. Garfield set up a large organization to execute the provisions of the act, but the chief branches were the administrative, distribution, and petroleum divisions. The distribution division had charge of the allocation of production quotas, the distribution of coal and coke to various States in defined consumer areas from particular producing districts, the diversion of coal, and zoning.

The Fuel Administration established a schedule of maximum prices for all sizes of coal f. o. b. mines throughout the country. While there were numerous exceptions, most of the prices were within the following ranges: Prepared sizes, \$1.90 to \$3.80; mine run, \$1.90 to \$3.55; and slack or screenings, \$1.65 to \$3. The jobbers' commissions were limited to 15 cents per ton, and the retailers' net margins were limited to 30 percent of the gross average margin during the year 1916. This met the required standard that maximum prices for dealers should allow "*the cost to the dealer and * * * a just and reasonable sum for his profit in the transaction.*"¹⁷

With the decline in coal prices after the signing of the Armistice the maximum prices were suspended on February 1, 1919, and the Fuel Administration was formally terminated on June 30, Congress having failed to appropriate funds for its maintenance. However, the

¹⁷ Sec. 25.

failure of consumers to accumulate during the summer stocks of coal for winter consumption, the strike of the coal miners in November, and the delayed delivery of coal, due to the strain put upon the railroads by the demand for winter coal at a time when railroad cars were being used for transporting crops, forced coal prices above the maxima previously fixed and subsequently suspended by the Government. Maximum prices were reestablished and remained in effect until April 1, 1920, when they were again suspended. The Food and Fuel Control Act ceased to be in effect on and after March 3, 1921.

The effect of the work of the United States Fuel Administration can easily be evaluated in terms of the purposes of this study. The prices established by the President were based upon cost studies made by the Federal Trade Commission, covering the 18 months ending July 1, 1917. In making this cost study the Federal Trade Commission dismissed all investment claims and used instead the producing cost, plus maintenance and depreciation cost. A study of these records shows that the Peabody-Lane prices voluntarily agreed upon were considerably above these costs, and the President's prices, as established and subsequently modified by the Fuel Administration, were approximately 38.8 cents a net ton f. o. b. mine below the Peabody-Lane prices. Multiplying this reduction by the 806,000,000 tons of coal produced during the Fuel Administration period, the savings to consumers were approximately \$312,728,000.

The Fuel Administration prices were based upon a bulk-line cost of production which was believed would permit the mining of approximately 90 percent of the available coal, without financial loss. As reported by the operators, the average cost of production for 84 percent of the total coal produced during the months of August and September 1917 was \$1.696. The statistical adjustments made by the Fuel Administration to correct minor mathematical errors increased this reported cost to only \$1.706. In effect this was an endorsement of the accuracy of the reports made by the operators. The average bulk line cost was fixed at \$1.902 or 19.6 cents above the average adjusted cost. This bulk line cost represented the price required to assure the mining of the necessary coal, as compared with the average cost, which involved the mining of coal only up to, or below, the average.

The maximum prices were sufficient, upon the basis of the reported costs, to permit, without financial loss, the mining of 98.4 percent of all the commercially available coal.¹⁸ The weighted average of all maximum prices was \$2.162 per ton. This weighted average price was but 26 cents above the bulkline cost, and was only 45.6 cents a ton above the weighted average cost for the whole country. This margin of 45.6 cents a ton shows little signs of profiteering, if any, in the coal business as a whole. The average f. o. b. mine realization per net ton of 2,000 pounds was \$1.32 in 1916, \$2.26 in 1917, \$2.58 in 1918, and \$2.49 in 1919. The net income of the coal mining industry in 1917 was \$203,919,000, but in spite of the increased production of 1918, the net income in this year was only \$148,847,000. In 1919, still under Fuel Administration prices, the net income of the industry was \$62,260,000.¹⁹

¹⁸ With respect to coal not generally available, i. e., unavoidably lost in mining, see appendix G.

¹⁹ Report of U. S. Coal Commission (1925) p. 2528. These figures represent net income (after interest) as reported to the coal commission. Apparently income taxes and excess profits taxes were deducted by some companies, but not by others, in reaching the figures reported. The Commission did not eliminate this discrepancy.

Data available and believed to be representative show the following rates of return on investment:²⁰

Period	Proportion of total tonnage represented	Investment per ton	Approximate rate of return (percent)
1916.....	1/4	\$2.78	8
1917.....			29
1916-17.....	1/3	3.12	19
1918.....			18
1919.....			6
1920 (9 months).....			23
1921.....			3
1918-21.....			13
1916-21.....			15

Fuel Administrator Garfield's price policy put the emphasis upon production rather than price, giving the operators the benefit of doubt to encourage increased output. The prices originally promulgated by the President were based on 100,000,000 tons, representing chiefly the larger and lower cost mines. The Fuel Administration increased the President's prices from time to time to attract new capital to coal mining by the hope of a return equal to or somewhat above that afforded by Government bonds, and more accurately to reflect costs of production. Effective October 29, 1917, each maximum price already in effect was increased 45 cents a ton to take care of the higher costs of production under the wage increases provided in the Washington Agreement (effective November 1, 1917).²¹ Nevertheless, the Fuel Administration did not lose sight of its basic policy—increased production of coal for war-time uses, at a reasonably low level of prices to the consumer, which would be consistent with a reasonable profit to the operator. This policy conformed to the standard prescribed in the act; namely, allowing *"the cost of production, including the expense of operation, maintenance, depreciation, and depletion, and . . . a just and reasonable profit."*²² On May 25, 1918, the maximum prices of all bituminous coal were reduced 10 cents a ton because of a supposed decrease in cost of production.

At no time during the period of the Fuel Administration, in fact at no time during the active period, did the mines as a group operate at capacity. During the war years, when industries were running 24 hours a day, the failure of coal production to equal or to exceed the demand was due to the inability of the railroads to move the coal from the mines to the points of consumption. Had there been adequate transportation facilities, the supply of coal would have been more than sufficient. The production of coal has been, and is, a problem of demand and of transportation facilities. The Fuel Administration met this problem of inadequate transportation facilities by cooperating

²⁰ Federal Trade Commission, *Investment and Profit in Soft-Coal Mining* (Government Printing Office, Washington, 1922), pp. 70-71.

Investment includes bonded indebtedness and other borrowed money. Rate of return is the relation between investment and net operating income before interest and Federal taxes. In the years 1917-21 excess profits taxes absorbed a substantial part of the large income of this industry.

²¹ This increase in prices did not apply (1) to any coal sold at the mine under an existing contract which provided that the price of coal sold thereunder would increase with any increase in wages paid to miners; and (2) in any district in which the operators and miners failed to agree upon a penalty provision, satisfactory to the Fuel Administrator, for the automatic collection of fines for lock-outs and strikes, as provided in the Washington Agreement.

Penalty provisions remained a part of wage contracts in the bituminous-coal industry until April 1, 1939.

²² Sec. 25.

with the United States Railroad Administration, by granting priority orders, and by zoning the distribution of coal.

The wages of miners were also subject to regulation under the Lever Act. With the increasing cost of living during the period of the World War, miners demanded wage increases. The Fuel Administration was instrumental in negotiating the Washington agreement (October 6, 1917). Table 4 shows the wage increases provided under this agreement.

Negotiation of other wage agreements of like nature was facilitated by the Fuel Administration for the States of Kansas, Missouri, Arkansas, Oklahoma, central Pennsylvania, Michigan, and Iowa. In these agreements the daily rate for inside skilled labor was the same as that for Illinois and Indiana, namely \$5. Agreements were also effected in the other coal-producing States. The Washington agreement became effective on November 1, 1917, subsequent to the increase of maximum prices by 45 cents a ton.

TABLE 4.—*Wage increases under the Washington agreement*¹

Occupation and State	Apr. 16, 1917	Nov. 1, 1917	Actual increase	Percent of increase
	<i>Cents per ton</i>	<i>Cents per ton</i>	<i>Cents per ton</i>	
Pick mining (run of mine):				
Illinois (Danville).....	74.00	84.00	10.00	13.51
Indiana (except block).....	74.00	84.00	10.00	13.51
Ohio (Hocking Valley).....	77.64	87.64	10.00	13.01
Western Pennsylvania (thin vein).....	77.64	87.64	10.00	13.01
Trackmen (inside skilled labor):	<i>Per day</i>	<i>Per day</i>	<i>Per day</i>	
Illinois.....	\$3.60	\$5.00	\$1.40	38.89
Indiana.....	3.60	5.00	1.40	38.89
Ohio.....	3.60	5.00	1.40	38.89
Western Pennsylvania.....	3.60	5.00	1.40	38.89
Outside common labor:				
Illinois.....	2.96	4.36	1.40	47.30
Indiana.....	2.96	4.36	1.40	47.30
Ohio.....	3.35	4.75	1.40	59.57
Western Pennsylvania.....	2.70	4.10	1.40	51.85

¹ F. E. Berquist and Associates, op. cit., p. 161.

The average number of days worked in 1916 was 230; in 1917, 243; and in 1918, 249—an all-time high. The average number of days the mines were idle due to labor disputes was 4 in 1916, 4 in 1917, and 1 in 1918. The number of days lost due to labor disputes increased to 25 in 1919 because of a strike over wage agreements.

The average number of men employed increased from 561,000 in 1916 to 603,000 in 1917, 615,000 in 1918, 622,000 in 1919, and 640,000 in 1920.

In view of its objectives—increasing production and expediting distribution at the lowest cost to the consumer consistent with a reasonable profit to the operator and fair wages to labor, and preventing local or general hoarding, speculation, and monopolization—the Fuel Administration must be given considerable credit as an emergency agency.

Although about 18,000 men and women worked for the Fuel Administration at some time during its existence, many of them served without compensation. The cost of this agency was but \$5,000,000. It was estimated that its maximum prices resulted in savings to consumers of more than \$300,000,000.

Chaotic Post-War Years Through 1922.

A miners' strike in 1919, lasting from November 1 to December 12, tied up operations employing 415,000 men in 22 States, and precipitated a coal shortage. As has already been noted, the Fuel Administration's powers were reestablished to cope with problems of price and distribution. At the end of 1919, stocks in the hands of consumers were subnormal. Production in this year was 20 percent below that of 1918. Notwithstanding this year-end disturbance, prices averaged 9 cents less in 1919 than in 1918.

With depleted stocks that had to be rebuilt, an industrial boom at the beginning of 1920, accompanied by a sudden increase in export demand, accentuated the market situation. This boom, as well as a car shortage which resulted from a railroad switchmen's strike beginning April 1, led to a runaway price situation in the spot market.

Mine prices of \$9, \$10, \$12, and in some instances as fantastic as \$20 per ton, were noted. The average price per ton for the year rose to the high figure of \$3.75, an all-time peak. Toward the end of the year prices broke back toward normal levels. The net income of the industry also established an all-time peak of \$250,000,000. The number of men employed increased to nearly 640,000 in 1920, as against 615,000 in 1918.

The following year 1921 witnessed a collapse of the post-war boom. In the depression that followed, the price receded by 85 cents, averaging \$2.89 per ton; production was at its lowest point in 10 years, 416,000,000 tons. The industry's net income of \$29,000,000 was only a little more than 10 percent of the 1920 income.

The succeeding year 1922 saw another strike affecting 460,000 miners (73 percent of the productive capacity) and extending over almost 5 months, with an average loss of 78 working days. Mines operated only 142 days and produced 422,000,000 tons. Again prices were driven upward and realization averaged \$3.02 per ton. No record is available to show whether 1922 was profitable for the industry as a whole.

To alleviate the shortage of coal which resulted from the strikes of the bituminous-coal and anthracite miners and railroad shopmen, Congress passed the Federal Fuel Distributor Act on September 22, 1922.²³ This act authorized the Interstate Commerce Commission to issue orders for priorities in railroad car service and for embargoes or other measures suitable for the equitable distribution of fuels to meet the emergency, promote the general welfare, and prevent unreasonably high prices for coal. A Federal Fuel Distributor was authorized to act as a fact-finding agent to recommend to the Interstate Commerce Commission the classes of consumers which should receive priorities in transportation and distribution.

This act expired a year after its enactment and is of minor importance in the history of Federal regulation. Another act,²⁴ passed at the same time, authorized the establishment of the United States Coal Commission, the reports of which are still considered of great historical value. The reports of this fact-finding body ("Hammond Commission") constitute the most extended and unquestionably one of the most valuable compendiums of engineering, economic, and

²³ Public, No. 348, 67th Cong.: 42 Stat. 1025.

²⁴ United States Coal Commission Act, Public, No. 347, 67th Cong.: 42 Stat. 1023 (Sept. 22, 1922), amended by Public, No. 499, 67th Cong.: 42 Stat. 1446 (Mar. 4, 1923).

statistical studies of the bituminous-coal and anthracite industries ever made.

In summary, during the war and the post-war years through 1922, the industry was beset with events which greatly modified earlier trends. The steady pre-war growth in production ceased after the forward surge of 1916, 1917, and 1918. Normal productive activities and adjustments at the mines were held in check by car shortages and far-reaching strikes. Actual and threatened scarcity of the Nation's coal supply characterized these years. Prices and net incomes reached high levels. New investments in the industry, encouraged by liberal profits in 1917, 1918, and 1920, expanded mine capacity. Generally speaking, the peak of wage returns for the industry as a whole was attained in 1920, and continued in the union fields in 1923; in non-union areas the rates dropped materially in 1921, but were either entirely or substantially restored in 1922. The number of mines rose from 5,700 in 1916 to 9,300 in 1922.²⁵

Table 5 gives the production and average price data for the post-war period.

TABLE 5.—*Production, capacity, average realization, and net income of the bituminous coal industry, 1919-23*

Year	Production (millions of net tons)	Average number of days mines operated	Capacity in working year of 308 days (millions of net tons)	Percent pro- duction was of capacity	Average value, f. o. b. mine, per ton	Net income or deficit (in millions)
1919.....	466	195	736	63.32	\$2.49	+\$62
1920.....	569	220	796	71.48	3.75	+249
1921.....	416	149	860	48.37	2.89	+29
1922.....	422	142	916	46.07	3.02	(1)
1923.....	565	179	970	58.25	2.68	(1)

¹ Data not available.

Source: U. S. Geological Survey, Mineral Resources of the United States. Net income data from Report of the United States Coal Commission (1925).

1923—A bench mark.

The year 1923 has special significance. It separates the previous trends from the succeeding years of liquidation. The number of employees, the number of mines, and their productive capacity were at all-time peaks; prices and wage rates were at high levels; car shortages and other impediments of preceding years were removed. The forces of competition were comparatively free to operate. No strikes of consequence occurred. Prices were dropping, and some of the smaller commercial operators were forced out of the market. Toward the end of the year a break in wages in nonunion fields began to enter the picture. "Overdevelopment was forcing intense competition and the nonunion fields, free to reduce costs by cutting wages, were beginning to press hard upon the union fields operating on a fixed wage scale."²⁶

While it is not exactly accurate to call competition of other fuels and the development of fuel economy new factors, their measurable effect upon the consumption of coal became most marked in the years succeeding the war. Bituminous coal, at the opening of the century and until the close of the war in 1918, was the source of about 70 per-

²⁵ For the number of mines operating in other years see Appendix A.

²⁶ U. S. Bureau of Mines, Mineral Resources of the United States, 1924.

cent of the total energy supply of the country. The repeated strikes, car shortages, the war, and other factors which increased coal prices to several times their former value from 1917 through 1923, led consumers to turn to other sources of energy. Competing fuels were quick to take advantage of the opportunity and impressively entered the market in competition with coal. Although coal is still the principal source of energy, its share of the total energy has steadily receded until in 1937 it had dropped to 45 percent.²⁷ Not only did fuel oil, natural gas, and water power competition contribute to this shrinkage, but fuel economy was at least of equal importance. Losses sustained on this account have not been as large as from some other causes, but they are permanent. It is estimated that from the beginning of the fuel economy movement in 1909 through the boom year 1929, the cumulative result represented about 33 percent for all industries and railroads together.²⁸ In other words, these industries and railroads were using in 1929 only two-thirds as much coal to produce the same results as would have been needed under the 1909 practices of coal combustion. A break-down of this estimate shows that electric public utilities had effected fuel economies of 66 percent at that time, steam railroads 40 percent, petroleum refiners 36 percent, iron and steel plants 25 percent, cement mills and all other manufacturers 21 percent.²⁹ Stated another way, "had there been no advance in thermal efficiency during the 20 years, and had the efficiencies of 1909 continued without change, American business would have consumed 210,000,000 more tons of bituminous coal in 1929 than were in fact required." This 210,000,000 tons would have required the operation of the full mine capacity in that year.

After 1929, the general slowing up of business, incident to the economic depression, hastened the decline.

The Long Depression in the Bituminous-Coal Industry, 1924-33.

As already noted, the closing months of 1923 saw the beginning of a period of intersectional competition. The leveling off of demand, following the war expansion, precipitated a long struggle of individual producers to obtain a greater share of the business. Some nonunion mines, not bound by general wage agreements, reduced prices by the device of wage cutting. Other mines were forced to follow suit in an effort to retain their share of the business. Gradually this spiral of wage cutting and price cutting spread to union mines, and contracts were abrogated under pressure of price cuts by competitors. The pressure of price-competition from nonunion fields caused the revision of the basic scale in the central competitive field in 1928, when it was reduced from \$7.50 to \$6.10 per day for inside skilled labor. By August 1932, when it was again revised to \$5, Ohio and western Pennsylvania had become nonunion and were not parties to the wage agreement. Central Pennsylvania had also gone nonunion.

²⁷ U. S. Bureau of Mines, *Minerals Yearbook*, 1938, p. 701-704.

²⁸ U. S. Bureau of Mines, *Minerals Yearbook*, 1932-33.

²⁹ *Ibid.*, p. 400.

All mines thus released from wage agreements were able to compete on a purely price basis. The downward trend in the average value of coal f. o. b. mines continued, dropping below \$2 in 1927 for the first time since 1916. The average for 1929 was \$1.78. That year saw the peak of the national industrial boom period, in which the coal industry did not share.

Unemployment and distress among mine labor was widespread during this period. Not only were wages greatly reduced in years following 1923 (in many cases being based on what could be paid out of the price that could be obtained), but the number of men employed dwindled from the 1923 peak of 705,000 until in 1929 the industry employed only 503,000. The years of general depression which followed 1929 and the rapid slump in the demand for coal created a particularly deplorable condition among mine workers. The average earnings of the 406,000 men who remained on the pay rolls in 1932, and who had only 146 days of work on the average, fell to \$662. In 1933, 419,000 men averaged only \$550.

Although 1929 is not a year particularly significant for the bituminous-coal industry, except by way of contrast with general industry, it may not be amiss to illustrate the extent of the contrast. In the important year of 1923, 705,000 men received \$851,000,000 in wages; in 1929, 503,000 men received only \$588,000,000—a reduction of about 31 percent. At the same time total wage payments in manufacturing industries had increased from \$11,000,000,000 to over \$11,600,000,000, or about 5.5 percent.

During these years of wage and price cuts the industry was not free from strikes and suspensions. In 1925, because of loss of business to southern rivals, western Pennsylvania operators demanded a revision of the 1924 Jacksonville agreement. Failing to obtain this, operators closed many mines in April, and reopened them in August on a non-union basis with reduced wage scales. There was also some breakdown in Ohio and in northern West Virginia, resulting in all of Ohio and Pennsylvania, with minor exceptions, becoming nonunion. Illinois and Indiana continued their contracts until March 31, 1928, when rates were reduced after another strike. A major suspension began in April 1927 at the expiration of the Jacksonville agreement, and 175,000 men were involved in Illinois, Pennsylvania, Ohio, Indiana, Kansas, Missouri, and Iowa. The renewal of the 3½-year agreement in Illinois on a lower scale was negotiated in August 1932, after 19 weeks of suspension.

During this period industry losses were severe. Except for the years 1924 and 1926, when aggregate net income data were not available, the industry showed an uninterrupted chain of annual net losses beginning in 1925 and continuing through the year 1933. In each of the years 1931, 1932, and 1933, losses amounted to approximately \$50,000,000.

During this period prices steadily fell until the average in 1932 was only \$1.31 per ton, the lowest since 1915. Table 6 gives production and average price data for the depression years.

TABLE 6.— *Production, capacity, average realization, and net income of the bituminous coal industry, 1924-33*

Year	Production (millions of net tons)	Average number of days mines operated	Capacity in working year of 308 days (millions of net tons)	Percent production was of capacity	Average value f. o. b. mine (per ton)	Net income or deficit (in millions)
1924.....	484	171	871	55.57	\$2.20	(1)
1925.....	520	195	822	63.26	2.04	—\$22
1926.....	573	215	821	69.79	2.06	(1)
1927.....	518	191	835	62.04	1.99	(1)
1928.....	501	203	760	65.92	1.86	—25
1929.....	535	219	752	71.14	1.78	—12
1930.....	463	187	770	60.78	1.70	+42
1931.....	382	160	736	51.90	1.54	—48
1932.....	310	146	653	47.47	1.31	—51
1933.....	334	167	615	54.31	1.34	—48

¹ Data not available.

Source: U. S. Geological Survey, Mineral Resources of the United States, and U. S. Bureau of Mines, Mineral Yearbook, 1932 and 1933. Net income data from Report of the U. S. Coal Commission (1925).

In summary, the bitter struggle for markets between the years 1924 and 1933 brought the industry into a state of complete disorganization, to which of course the general economic depression of 1930 to 1933 added momentum. Wages had fallen from a \$7.50 per-day base to a very low level. In the early days of 1933, Western Pennsylvania wage scales varied from less than \$1.50 per day to a few instances of as high as \$4 and over. Typical workers, with often only 2, 3, and 4 days' work available per week, were working at a rate of earnings as low as \$500 per year, many for considerably less. The unions were completely disrupted and barely alive. (It has been stated that not over 15 percent of all coal labor supported unions just prior to the N. R. A. in 1933. Shortly thereafter the industry was 90 to 95 percent organized.)

In 1919, 1920, and 1921, coal corporations paid an average in each year of \$33,000,000 in taxes, partly on war-time excess profits, to the Federal Treasury; by 1932 the tax paid had dropped to \$3,000,000. Competing fuels and the advance of fuel economy materially reduced consumption of coal. After 1929, the general depression accelerated the downward trend of production to a low point of 310,000,000 tons in 1932, with mines working only 146 days, and prices averaging \$1.31 per ton—the lowest since 1915. Pitifully low earnings and widespread unemployment had reduced labor to a mere subsistence condition at best, and many miners depended upon local relief.

The intersectional struggle beginning in 1924, implemented by price and wage cutting, had resulted in a substantial shift in the proportion of tonnage furnished by the principal southern States as compared with the principal Northern States. The Appalachian, Southern, and Middle Western producing States account for a little more than 90 percent of the Nation's output. The major part of this production comes from the Northern States of Pennsylvania, Ohio, Indiana, and Illinois, and the Southern States of Kentucky, West Virginia, and Virginia. Of the total produced in 1923 by these seven States, the northern group furnished approximately 64 percent, and the southern group about 36 percent. In 1933 the northern group furnished 49.8 percent, and the southern group 50.2 percent.

CHAPTER II

LEGISLATIVE HISTORY OF BITUMINOUS COAL

FROM THE WARTIME FUEL ADMINISTRATION TO THE NATIONAL RECOVERY ADMINISTRATION

The Government has been concerned about this troubled industry almost continually since the war-time control was finally relinquished after its recall in 1919.

From 1920 to 1922 there occurred the investigation of price increases by the Senate Committee on Interstate Commerce, resulting in the Frelinghuysen report. Senator Frelinghuysen introduced two bills in 1920, two in 1921, and later two revisions, each attempting to overcome some of the seasonal production difficulties by offering inducements by way of decreased freight rates in the slack seasons. The last two also provided for regulation. All branches of the coal industry violently opposed the Frelinghuysen bills.

After the termination of the United States Fuel Administration in June 1919, rapidly rising coal prices and a coal miners' strike in November led to the recall of the Fuel Administrator and the reestablishment of maximum prices. The United States Bituminous Coal Commission, composed of Henry M. Robinson, Rembrandt Peale, and John P. White, was appointed on December 19, 1919, to study the situation and to arbitrate. The majority award of this three-man Commission provided for wage increases in the central competitive field and approved the 48-hour week. Recommendations were made with respect to housing conditions in the coal fields; seasonal freight rates, car supply and distribution; coals used as locomotive fuel; and storage of coal by Federal and State agencies.

In 1921 Senator Calder of New York also introduced a bill calling for an investigation, and for publicity, taxation, and emergency price control. A second bill defined and punished profiteering.

In 1922 the Senate Committee on Education and Labor investigated conditions in the West Virginia coal fields, resulting in the Kenyon report. In the same year, the House Committee on Labor produced the Bland report on labor conditions in the coal industry. Representative Bland introduced a bill setting up a coal investigation agency.

Senator Borah and Representative Winslow in 1922 sponsored a bill which, after enactment, set up the United States Coal Commission to study the entire industry in all aspects and to report to Congress. This was the John Hayes Hammond Commission, whose fact-finding labors of 1922 and 1923 were reported in five volumes, including an atlas of statistical tables. These were published in 1925.

Representative Treadway's bill for emergency control in 1925; Senator Copeland's for fact-finding and strike control in 1926, Senator Watson's (drafted by counsel for the United Mine Workers) for permanent commission control in 1928 and its reintroduction in 1930—all died.

By 1932 the union strength had been greatly weakened. Labor was in dire straits as to wage scales and earnings. Misery was widespread because of unemployment. The general counsel of the United Mine Workers of America, Henry Warrum, prepared a bill intended to restore labor's influence and status by permanent commission control, Federal licensing of mines, and regulation of marketing pools or associations. This became the Davis-Kelly bill. It drew heavily from the British Coal Act and the Watson bill.

Representative Lewis in 1932 introduced another control bill, based on his study of the previous proposals, plus the British Coal Act, which provided for full commission control with tonnage allocation and price fixing. An amendment by Senator Hayden introduced the excise tax idea. Later in the session, the Lewis-Hayden bill was reintroduced, combining the features of both prior bills.

With the approval of the National Industrial Recovery Act on June 16, 1933, the industry became one of the Administration's first concerns and its code was approved September 18, 1933. Thus bituminous coal prices (and indirectly its production and distribution) were regulated for the first time since the Fuel Administration days of 1917-19 and the Federal Fuel Distributors' activity of 1922.

COMPARATIVE STABILITY UNDER THE NATIONAL RECOVERY ADMINISTRATION CODE

The Bituminous Coal Code adopted by the industry under N. R. A. provided a wage pattern for the industry on a national basis for the first time, and the right of collective bargaining was guaranteed. The wage schedule included in the code recognized a North-South competitive relationship for the first time, in place of the old East-West basis. Basic wages in the North were established at \$4.60 per day, and in the South generally at \$4.20, with the middle western fields maintaining their existing contract scales at \$4.57½ in Indiana, \$5 in Illinois, and \$4.70 in Iowa. Western Kentucky was put on a basis of \$4 per day. Wages in other fields throughout the country were related to these rates.

Experience had amply demonstrated that a negotiated wage scale is valueless without a price structure that will insure ability to pay the scale. The N. R. A. Code therefore provided for minimum price fixing subject to the approval of the Administration. Neither the National Industrial Recovery Act nor the code provided standards for the fixing of prices. It is important to remember that this price fixing for bituminous coal had as one of its prime purposes the support of the wage scale as well as the purpose of minimizing operators' losses.¹ The price lists were developed by subdivisional code authorities (corresponding generally to the districts set up under the Bituminous Coal Act of 1937), each subdivision preparing its own proposed price list, which prices were by conference correlated in common markets where the producers of two or more districts met in competition.

The prices so correlated, upon approval by the National Recovery Administration, became effective as minimum prices. The aim of the minimum price schedule was to approximate a total cost, excluding capital charges.

¹ The Bituminous Coal Code had, of course, other purposes such as the increase of employment through reduction of hours.

A comprehensive detailed system of monthly reporting to the sub-divisional code authorities was instituted. These reports were later carefully summarized by producing districts or subdivisions. The reports covered monthly detailed costs, wage and employment statistics, sales, and realization. This cost reporting continued from the month of November 1933 to the month of January 1935. It is important to remember that these cost reports were primarily intended for use in wage conferences. The general recovery program had begun to have some stimulating effect on industry in the latter part of 1933, but the bituminous coal industry realized more significant results from code operation in 1934.

After 5 months of the first wage scale, a new wage contract, negotiated in April 1934, established for the first time in any industry a maximum work day of 7 hours and a 35-hour week, with the basic daily wage scale advanced approximately 9 percent at the same time.

According to the N. R. A. tabulation of monthly reports (from something less than 2,000 mines each with a daily production of 150 tons or over, representing from 65 percent to 80 percent of the total production in various months), the total mine realization per ton averaged \$1.84 in 1934 against a cost of \$1.79. Thus there was an indicated margin of about 5 cents per ton above the costs before capital charges. The Internal Revenue Bureau reports for the industry an aggregate net loss for that year of \$7,500,000 (which, of course, is after the allowed capital charges). Under code operation, which actually depended largely on the industry itself, the year 1934 undoubtedly provided for labor, operators, and consumers a remarkable approach to balance, after the chaos which had existed for several years past.

The limited scope of this report precludes a detailed review of this experience. The minimum prices established in the fall of 1933 and revised from time to time under authority of the Administrator were very generally observed for nearly a year. Late in 1934, however, code prices began to break under pressure of price cutting to increase the tonnage of individual mines. Code enforcement was rendered difficult by issuance of a number of injunctions against code prices, after which enforcement seems not to have been pressed vigorously. In spite of several amendments to the code, designed to arrest price cutting, the price structure was crumbling fast by the spring of 1935. Prices broke all the way from 13 cents to 30 cents, 40 and 50 cents per ton, in some cases more, below the code prices. The wage scale and working hours were, however, universally maintained, and in October 1935 another wage increase of about 10 percent went into effect.

FIRST GUFFEY BILL 1935

Meantime, on January 24, 1935, Senator Guffey of Pennsylvania introduced a bill in the Senate,² which was entitled "A bill to stabilize the bituminous coal mining industry and promote its interstate commerce; to provide for the competitive marketing of bituminous coal; to levy a tax on bituminous coal and provide for a drawback under certain conditions; to declare the production, distribution, and use of bituminous coal to be affected with a national public interest; to conserve the bituminous-coal resources of the United States and to establish a national bituminous-coal reserve; to provide for the general

² S. 1417.

welfare, and for other purposes." This bill was the subject of hearings before the Senate Committee on Interstate Commerce, starting before a subcommittee thereof on February 19, and running through March 7, 1935. The bill as introduced had been drafted by Henry Warrum, general counsel of the United Mine Workers, after conferences with leading coal producers. It embodied many of their ideas plus those of labor, and drew much from the various proposals of the past. It underwent much revision in the Senate committee. It had the support of a large and powerful group of producers, said to represent more than 60 percent of the production of the country. This represented a change of attitude within the industry, which had almost solidly opposed all previous proposals for regulation. The roster of opponents was also impressive, including many of the largest producing companies in the coal industry, the steel industry (fearing a spread of regulation), the National Association of Manufacturers, and other industrial consuming interests. The transcript of these hearings has been published, and to discuss the bill in any detail seems unnecessary except as it leads to the main subject of this report—the operation of the Bituminous Coal Act of 1937.

This 1935 bill as introduced provided for regulation by a Commission; for a tax of 25 percent of the sales price, 90 percent of which would be remitted to producers who held membership in the "code"; provided a "Bituminous Coal Code" incorporated in the body of the act; provided a National Coal Producers Board and 24 district boards; provided that this National Board should determine maximum tonnage allocation to the respective districts and that the district boards would in turn allocate a maximum tonnage to each mine, with periodic revisions (based on standards expressed in the act); and provided for the assignment of quotas to new and reopened mines.

The bill also directed the Commission to ascertain the cost of production, including specified items, to determine and announce the average cost for each district not later than March 1 of each year, such average cost to become the fair minimum market price for that district for 1 year beginning April 1. It directed each district board to submit a list of maximum prices to the Commission for its approval. The Commission was authorized, upon failure of the district board, to fix same at "not less above the minimum prices as will provide a fair return upon the investment, and with the view of permitting competition within the bracket of minimum and maximum prices."

A Bituminous Coal Labor Board of three members assigned to the Department of Labor was provided and authorized to determine the nature of any organization of employees, whether free of interference by employer; to require an employer to meet with employee representatives for collective bargaining; and to act as mediator in any labor disputes not determinable by local or district tribunals.

The bill provided that an agreement upon hours of work, conditions of labor, and wages, by a majority of employees would also bind the minority.

In Title II the bill provided for a bituminous coal reserve, whereby the Secretary of the Interior, on approval of the Coal Commission, could purchase bituminous coal properties either by condemnation or as a result of offer by the owner. Provision was made for holding such reserve and for operation under permit as needed. An appropriation of \$300,000,000 was authorized in the nature of bonds carrying

3 percent interest, maturing in 50 years. An additional tax of 10 cents per ton was to be levied on all production. Forty percent of the tax collected was to provide a sinking fund for interest and retirement of bonds, and 60 percent was to be available for the rehabilitation of miners dismissed from employment by reason of the purchase of these coal properties by the United States.

The bill, as it reached the House of Representatives³ for the consideration by the Committee on Ways and Means, had been changed by the Senate in some particulars, the tax drawback for code members becoming 99 percent instead of 90 percent. The provision for the allotment of tonnage to be produced was deleted, and the provision for price establishment was changed so as to provide for the establishment of minimum prices as the major basis except in an emergency, when the Coal Commission would be authorized to establish a maximum schedule. Thus price regulation would rest upon minimum prices averaging as nearly as possible the average costs, with no allowance for profit, except in times of emergency under maximum price schedules. The labor provisions of the House bill, H. R. 8479, were changed so that in the negotiation of wage and maximum hour agreements in any one district or group of two or more districts the tonnage which must be represented by producers was increased from one-half to two-thirds. The House bill authorized the Commission to investigate the necessity for the control of production of bituminous coal and the methods by which such control might be exercised, and to hold hearings thereon. It was to report its conclusions and recommendations to the Secretary of the Interior for transmission by him to Congress not later than January 6, 1936. The Commission was also authorized to make complaint to the Interstate Commerce Commission with respect to tariffs, rates, charges, and practices which related to the transportation of bituminous coal, and to prosecute the same. The Interstate Commerce Commission was to notify the Coal Commission of any proceeding pertaining to the transportation of coal and to permit the Commission to appear and be heard.

The House bill provided for only 22 district boards grouped under 9 minimum price areas.

The provision for the "miners' rehabilitation fund" was retained. The amount of money to be paid into this fund was to equal 25 percent of the first amount of bonds issued to acquire the national bituminous coal reserve. After the termination of the National Bituminous Coal Commission, all the powers, duties, and the authority of the Commission with respect to the bituminous coal reserve were to be transferred to and exercised by the National Bituminous Coal Reserve Board, the three members of which were to be appointed by the President, by and with the advice and consent of the Senate.

The Ways and Means Committee hearing on this Guffey-Snyder bill⁴ ended on June 28, 1935, and the next day the United Mine Workers of America sent out a strike order to all locals. On the same day however, a conference between the Secretary and the Assistant Secretary of Labor, the president of the United Mine Workers of America, and the chairman of the Coal Operators Wage Scale Committee resulted in a wage truce until August 1, 1935, when in response to

³ H. R. 8479. Hearings on this bill were held on June 17-21, 25-28, 1935.

⁴ H. R. 8479.

the President's request the miners and operators extended the N. R. A. wage contract until September 16.

The Guffey bill was again introduced to the House on August 12,⁵ and was passed by the House and Senate on August 19 and 22, respectively. Many of its faults and inconsistencies were the result of compromises necessary to satisfy opposing interests and to obtain its enactment.

BITUMINOUS COAL CONSERVATION ACT OF 1935

As signed by the President, August 30, 1935, the Bituminous Coal Conservation Act of 1935⁶ lacked certain features of the bill H. R. 8479—namely, the provision that coal mining companies were to accept the code as a prerequisite to engaging in interstate transactions; that the approval of the Commission was necessary for the issuance of Interstate Commerce Commission certificates of convenience and necessity for railroad track extensions to coal mines, the bituminous coal reserve, and the miners' rehabilitation fund.

The act gave certain privileges to farmers' cooperatives with respect to discounts and patronage dividends, reduced the membership of the Commission from 9 to 5, and increased the number of district boards from 22 to 23.

Unlike previous bills, the act provided for the establishment in the Interior Department of the office of the Consumers' Counsel, National Bituminous Coal Commission. The duty of the Consumers' Counsel was to appear in the interest of the consuming public in any proceeding before the Commission and to conduct such independent investigation of matters pertaining to the bituminous coal industry and to the administration of this act as might be necessary to enable him to represent properly the consuming public in any proceeding before the Commission. The other provisions of the 1935 act were substantially the same as those of the bill H. R. 8479.

The Commission was authorized to obtain reports from producers and require producers to maintain a uniform system of accounting of wages, mine operations, sales, profits and losses, and to use such other sources of information as it deemed advisable.

Members of the district boards were to establish and maintain statistical bureaus which were to receive from all code members reports on spot orders, copies of all contracts for the sale of coal, copies of all invoices and credit memoranda, and other information which the Commission might authorize or require.

Each district board was to determine the weighted average of the total cost of the ascertainable tonnage produced therein in the calendar year 1934, to adjust such average costs to take account of any change in wage rates, hours of employment, or other factors exclusive of seasonal changes, which substantially affected cost, and to submit such adjusted cost to the Commission. From such cost data and the computations upon which they were based the Commission was to determine the weighted average of the total cost of the tonnage produced in each minimum price area in the calendar year 1934. Included in total cost were the cost of labor, supplies, power, taxes, insurance, workmen's compensation, royalties, depreciation, depletion, and other

⁵ H. R. 9100.

⁶ Public, No. 402, 74th Cong. (H. R. 9100); 49 Stat. 991 (August 30, 1935).

direct expenses of production, Coal Operators' Association dues, district board assessments and board operating expenses, the reasonable cost of selling, and the cost of administration. This weighted average cost for a minimum price area was then to be submitted to each district board therein and used as a basis for the establishment of minimum prices. "In order to sustain the stabilization of wages, working conditions, and maximum hours of labor," such minimum prices were to yield for each district a return per net ton equal as nearly as might be to the weighted average of the total cost of such minimum price area. After taking into account the various kinds, qualities, and sizes of coal and transportation charges thereon, the district boards were to coordinate such prices upon a fair competitive basis in various consuming marketing areas. These prices were to reflect at points of delivery in such consuming marketing areas the relative market values of the various kinds, qualities, and sizes of coal produced in the different districts. Such coordinated prices and rules, regulations, and data upon which they were determined were subject to approval, disapproval, or modification by the Commission.

The Commission was authorized to establish maximum prices for coal in order to protect the consumer of coal against unreasonably high prices. No maximum price which would not return cost, plus a reasonable profit, was to be established for any mine.

The "unfair methods of competition" were similar to those of the "N. R. A. Code of Fair Competition for the Bituminous Coal Industry," the bill H. R. 8479, and of the later Bituminous Coal Act of 1937.⁷

Marketing agencies were authorized for the purpose of marketing the coal of their members, with due respect for the standards of unfair competition listed in the act. Such a marketing agency was to be truly representative of at least one-third of the tonnage of any producing district or groups of producing districts.

The Bituminous Coal Labor Board of three members appointed by the President was assigned to the Department of Labor. One member was to be a representative of the producers, one a representative of the organized employees, and the third, the Chairman, was to be an impartial person with no financial interest in the industry and with no connection with any organization of employees. The board was to hear evidence in labor disputes between employees and employers and to report thereon to the Commission. It was authorized to arbitrate disputes over collective bargaining and to hold elections to determine the bargaining agent.

A wage agreement negotiated in any district or group of two or more districts by collective bargaining between representatives of producers of more than two-thirds of the annual tonnage of such district, or group of districts, and representatives of the majority of mine workers therein, was to be filed with the Bituminous Coal Labor Board and accepted by the code members as the established minimum wages.

Code members were to accept such maximum daily and weekly hours of labor as might be negotiated in a contract between the producers of more than two-thirds of the annual national tonnage in the preceding year and the representatives of more than one-half of the mine workers employed.

⁷ See Appendix E, sec. 4 II (1).

Employees were given the right of collective bargaining and were entitled to select their own check-weighman. They were not to be required to join a company union, live in company houses, or trade at company stores, as a condition of employment. The act, in effect, constituted minimum wage legislation.

Difficulties of Operation.

The labor situation previously described was settled before the Commission began to function, but other difficulties were immediately encountered. Sixteen Kentucky coal operators filed suit on September 10, 1935, for an injunction against the enforcement of the act, and other suits for injunctions followed. On September 28, the Commission held its first organization meeting, and on October 9, 1935, promulgated the Bituminous Coal Code.

At first the Commission was handicapped in its administration of the act because there was no money available, but after obtaining sufficient finances, the organization of its administrative machinery and of the district boards proceeded more rapidly. On November 21, 1935, the Commission held its first public hearing to determine the advisability of establishing price groups and coal classifications. It was not, however, until January 1936 that the Commission ordered each district board to adopt standards of coal classifications, rules of procedure in making such classifications, and methods for applying such standards.

Initial Prices Proposed—Act Declared Unconstitutional.

Districts 14, 16, 17, and 18 (Arkansas, Oklahoma, Colorado, and New Mexico) were the first to propose minimum prices. These schedules were announced and made effective in December 1935, although the weighted average cost of Minimum Price Areas No. 3 and 5 had not yet been determined by the Commission. Such costs for the price areas were announced by the Commission in February, March, April, and May 1936, after having received cost and realization data from the district boards. Several other districts proposed schedules of minimum prices, but these were never put into effect because of the uncertainty over the outcome of the *Carter Coal case*, and finally because the Supreme Court declared the labor provisions unconstitutional and the price provisions also, holding them inseparable from the labor provisions.⁸

The purpose of the Bituminous Coal Conservation Act of 1935 was the stabilization of coal prices to permit the maintenance of the wage structure established by the wage agreement between coal operators and the recognized unions. To do this it provided for the establishment of collective bargaining, minimum prices, minimum wages, and maximum hours of employment. In effect, as previously stated, it was a minimum wage law.

In the act and its administration, no distinction was made between prices to different classes of consumers, i. e., prices based on values as to uses. No study was made on the necessity for, and the methods of, production control. The main achievement of the National Bituminous Coal Conservation Act of 1935 was the collection of individual mine costs and realization data, and the formulation of a

⁸ *James Walter Carter v. Carter Coal Company et al.* 298 U. S. 238 (May 18, 1936).

procedure for establishing minimum prices which was of considerable value in the regulation to follow.

The decision of the Supreme Court had been anticipated, and on May 20, 2 days after the Supreme Court decision, a new bill⁹ was introduced in the Senate by Senator Guffey, and in the House by Representative Vinson. This new bill was substantially the same as the 1935 act, except that it lacked the labor provisions which the Supreme Court had declared unconstitutional. This bill was supported by the United Mine Workers of America and by the "special legislative committee of the National Conference of Bituminous Coal Producers." It was opposed by the National Association of Manufacturers.

Subject to Senate hearings on the Guffey-Vinson bill, the House passed this bill by a vote of 161 to 90. There was considerable opposition to the bill in the Senate, which finally failed to pass it, due to filibuster, in spite of the fact that the Senate Interstate Commerce Committee had approved an amended version.

BITUMINOUS COAL ACT OF 1937

After the reconvening of Congress in January 1937, Senator Guffey again introduced a coal stabilization bill,¹⁰ the provisions of which were very similar to those of the earlier Guffey-Vinson bill.¹¹ The coal stabilization bill provided, however, for an excise tax of 1½ percent of the sales price of all coal at the mine. Code members were exempted from another excise tax of 13½ percent of the sales price at the mine.

The statistical bureaus were to be established by the Coal Commission, and the power to prescribe minimum and maximum prices was very definitely given to it. With respect to maximum prices the earlier bills provided that the maximum price should yield the cost, plus a reasonable profit. S. 1 provided, however, that any maximum price established should yield a fair return on the fair value of the property.

Hearings were held before the Senate on S. 1 on March 1, 1937. This Guffey-Vinson bill, as revised by the Senate Interstate Commerce Committee, was passed by the House on March 12, and by the Senate on April 6. The bill was signed by the President on April 26, 1937.¹²

The Bituminous Coal Act of 1937 as it became law embodied several changes over previously proposed legislation. An excise tax of 1 cent a ton was levied on all coal at the mine. Code members were exempted from another excise tax of 19½ percent of the sale price or the fair market value at the mine. Of the seven members of the Bituminous Coal Commission, two represented the operators, two the miners, and three represented the Government or public. The powers of the Commission and of the Consumers' Counsel were considerably strengthened and increased. The Consumers' Counsel was to report directly to Congress rather than to the Secretary of the Interior.

⁹ S. 4668.

¹⁰ S. 1.

¹¹ S. 4668.

¹² Public, No. 48, 75th Cong., 1st sess. (H. R. 4985); 50 Stat. 90 (April 26, 1937).

The 23 producing districts were assigned to certain broader areas for the purposes of extending weighted average costs of production into 10 minimum price areas. Lignite was exempted from the act, and no reference was made to the rehabilitation of unemployed coal miners, or to maximum hours and minimum wages.

The procedure for the proposal, coordination, and establishment of minimum prices, and of holding public hearings thereon, was broadened and clarified. Unlike its predecessor, this 1937 act provided that proposed minimum prices should also take into account values as to uses, seasonal value, and, transportation methods, and the competitive relationships between coal and other forms of fuel and energy.

CHAPTER III

REGULATION OF BITUMINOUS COAL UNDER THE 1937 ACT

INTRODUCTION: THE SITUATION IN 1936

Before the Bituminous Coal Act of 1937 and its operation are described in detail, it is desirable to have in mind the situation current in the industry when the act went into effect, in addition to the general history of the industry and of previous Federal regulatory legislation described in the preceding chapters. The Bituminous Coal Commission's methods of operation as prescribed in the act must be appraised in this setting. For that purpose a brief résumé of conditions in the year 1936 is given below, with particular emphasis upon volume of output, the competition of other fuels, the channels of distribution, the direction of flow of coal to markets, the freight charges involved, and the principal consumers and the areas in which they are located. This résumé indicates the importance of some of the complex economic considerations which the 1937 law requires the Commission to take into account during the 4 year period the act is to be in effect. The year 1936 is important because it is the base or standard year prescribed by the 1937 act; weighted average costs for each minimum price area are to be determined for 1936, and adjusted for any changes thereafter, as a basis for determining prices.

The wide producing area and the large number of operating mines increase the complexity of the Commission's task. Commercial mines in operation in 1936 numbered 6,875.¹ They were located in 33 States, of which 5 are unimportant, and in Alaska. Only in North Carolina has the Coal Commission, after hearings, determined that the production does not affect interstate commerce and is not subject to price regulations; the production of North and South Dakota was found to be lignite and not subject to the act.

The 1936 production of 439,000,000 tons gave the mines an average of 199 days of work, the best since 1930. Had these mines been able to operate a full 261-day year they could have produced 576,000,000 tons.² Their excess capacity was nearly 30 percent more than the demand in 1936.³ Mines with an output of over 100,000 tons produced 83.8 percent of the total; those of over 200,000 tons produced 69 percent of the total. There were 477,000 men employed.

Mechanization in deep mines had shown rapid advances during the depression years—the percent of underground output loaded mechanically more than doubled, having risen from 7.4 percent in 1929 to 16.3 percent in 1936.

Competition from competing fuels was aggressive; the sale of oil burners reached a peak of 196,877. Bituminous coal in 1936 con-

¹ Figures on commercial mines in operation are compiled by the Bureau of Mines. These figures exclude operating mines producing less than 1,000 tons per year.

² For a discussion of capacity see ch. I, pp. 237-244.

³ Coal Age for September 1931 offered the interesting statistical comment that, if every commercial coal company producing less than 200,000 tons had been wiped out of existence in 1928, the companies producing in excess of 200,000 tons and operating 1,269 mines, by working on a 260-day basis, could have supplied the 1929 coal demands and would have had 70,000,000 tons excess output.

tributed 50.2 percent of the total energy supply, while oil and natural gas together contributed 39.8 percent, water power 3.5 percent (prevailing fuel equivalent, as shown in appendix B), and anthracite 6.5 percent. This was a temporary gain from 48.3 percent in 1935 for bituminous coal, but in 1937 the percentage fell again to 48 percent.

In spite of a decided pick-up in business activity, resulting in an increased market and a 19 percent larger coal production than in the previous year, the industry in 1936 sold its coal generally below cost and showed an aggregate loss of \$6,524,000 on the year's operation.⁴ This was the industry's closest approach to an actual profit in at least 10 years.

Channels of Distribution.

Bituminous coal is marketed through various channels, the most important of which follow:

Channel: ¹	Percent of total ton- nage sold in 1929
Sales direct to consumers (including retailers) invoiced by main office to the mining company.....	35.6
Deliveries direct to consumers who own or control the mine through direct ownership, and sales to affiliated consumers.....	21.3
Sales through a separately incorporated sales agent owned by the same interests as is the mining company.....	20.0
Sales to independent wholesalers or jobbers, and sales through unaffiliated agents on a commission basis.....	18.2
Sales arranged and invoiced by branch offices of the coal company..	4.5
Other.....	.4

¹ (Source: Census of Mines and Quarries 1929.)

It is probable that in recent years the proportion of coal marketed through these channels has changed, a decrease having taken place in that sold direct to consumers (either independent or affiliated with a producer) and an increase in the proportion sold to independent wholesalers or through unaffiliated sales agents on a commission basis.

Sales direct to consumers eliminate part or, in the case of consumers who own or who are affiliated with the producing company, probably all the cost of selling involved in other channels of marketing. In times of high industrial activity the mines which are owned or controlled by the consumer, either directly, or indirectly through stock ownership, operate more steadily than mines selling coal on the commercial market. In a depression, however, the consumer often closes the mine when he finds that he can buy coal on the market more cheaply than he can produce it.

Generally speaking, only the larger companies maintain branch offices or separately incorporated sales agencies. These are able to study the special field requirements of various consumers, keep in touch with competitive conditions, supply technical advice on combustion equipment, and recommend the coal best suited for the most

⁴ U. S. Bureau of Internal Revenue: Statistics of Income. These figures may overstate the losses because of the method by which depletion is computed. See pp. 288-289 of this report.

economical results in the consumers' equipment. When sales are handled through a wholesaler or jobber, the coal is shipped from the mine directly to the retailer or to the consumer, the distributor (wholesaler or jobber) taking title to but not physical possession of the coal. A large wholesaler may render the services of a sales agent, a combustion engineer, or even a banker, insofar as he advances to the producer money to meet pay rolls and extends credit to the retailer or consumer. Under the present act, distributors get a discount from whatever minimum prices may be in effect and must resell such coal at not less than the minimum prices established for sales f. o. b. mines. For the United States the average cost of selling bituminous coal in cargo or in railroad carload lots in 1937 was 12.73 cents a ton.⁵

The independent sales agent performs functions similar to those of the wholesaler, but does not necessarily take title to the coal. The sales agent receives a fee, usually so much per ton, for his services which, in the case of a marketing agency, may include classification of coals, price fixing, proration of sales, advertising, research, and technical advice.

In 1936, when the production was 439,000,000 tons, commissions were reported to have been paid to sales agents on about 145,000,000 tons. The tonnage sold to wholesale distributors for resale is unknown; the best estimate is from 75,000,000 to 90,000,000 tons. Thus, probably 70 to 75 percent of commercial sales were made through selling companies.

The services of the retailer are generally known. It is customary for him to try to stimulate out-of-season sales by granting discounts ranging perhaps from 25 cents to \$1.00 per ton or more on coal purchased during the summer months.

Bituminous coal moves, then, through these channels, sometimes from one field through another (crosshauling), to various consuming markets.

The Flow of Coal to Markets.

Bituminous coal from all the principal producing States finds its way outside the State of origin, about 90 percent of the total production moving into interstate commerce. Coal reaches the interstate markets of the country by a maze of hauls and crosshauls. This complex competitive picture cannot adequately be described, however, in this brief study, and space is taken to enumerate only major movements.

From the great Appalachian fields (Pennsylvania, Ohio, West Virginia, Maryland, Virginia, Tennessee, eastern Kentucky, and Alabama), which together accounted for about 73.38 percent of the total production of the United States in 1937, table 7 shows a number of definite movements.

⁵ Average Cost of Selling Bituminous Coal in Cargo or Railroad Carload Lots, in cents per ton, in 1937, by W. H. Young. National Bituminous Coal Commission, Exhibit No. 11, General Docket No. 15. April 25, 1938.

TABLE 7.—*Distribution of bituminous coal from the Appalachian fields, 1937*

Destination	Tons	Percent of Appalachian production
Tidewater..... Atlantic ports to which coal is shipped by rail, dumped, and loaded into vessels for reshipment or use as bunker fuel.	31,688,907	9.69
New England (also included under "tidewater" and "all-rail other than railroad fuel").....	17,802,000	5.45
Via tidewater.....	12,917,000	3.95
Via rail.....	4,885,000	1.50
River and ex-river points..... Coal originated on the Ohio River and its tributaries, and on the Warrior River in Alabama. Most of this coal moves only a short distance but part of (known as ex-river coal) is unloaded from a barge at some river point and is reshipped to another via rail.	27,478,515	8.41
Great Lakes..... Lake ports to which coal is shipped via rail and reshipped in vessels or used as bunker fuel.	44,111,898	13.50
West-bound rail to Mississippi Valley..... Coal shipments to this region reflect not only the important competitive situation between the different Appalachian fields in the large western market but also that between the Appalachian fields and the middle western fields of Indiana, Illinois, and western Kentucky.	85,294,000	26.09
All-rail other than railroad fuel..... Includes coal reported as "shipped to distributors, destination unknown."	59,082,687	18.07
Railroad fuel, all-rail..... States in which coal is consumed are not known.	52,732,939	16.13
Truck deliveries..... Shipments by truck move largely to markets adjacent to or near the mines, although shipments to points 150 and 200 miles from the mines are not uncommon.	18,349,135	5.61
Mine fuel..... Coal used at the mine (includes coal made into beehive coke at the mine). Used by mine employees.	6,280,652	1.92
Tonnage unaccounted for in distribution analysis.....	1,579,747	.48
	332,052	.10
Total production of the Appalachian fields (includes change in inventory and coal unaccounted for).....	326,920,532	100.00

Source: U. S. Department of the Interior, Bituminous Coal Division: Bituminous Coal Tables, 1937-38.

Concentrated movements of bituminous coal are not general for fields other than the Appalachian. In other fields a smaller tonnage is produced and distributed to many markets over a wide area.

Differences in freight rates from mines which compete in common consuming markets have been a major consideration in the establishment of coal prices. For several years the freight rates per ton on coal from producing districts to destination points have in so many cases exceeded the value per ton of coal at the mine that the average freight revenue per ton from the applicable freight rates has represented over 52 percent of the average destination carload price of the coal. Table 8 shows the average freight revenue per ton of bituminous coal, the average value per ton f. o. b. mines, and the percent the average freight rate is of the average value per ton delivered.

TABLE 8.—Average freight revenue and average value per ton of bituminous coal ¹

Year	Average freight revenue per ton, originated by class 1 railroads ²	Average value per ton f. o. b. mines ³	Average destination value per ton ⁴	Percent average freight rate is of average value per ton delivered
1928.....	\$2.27	⁵ \$1.86	\$4.13	54.96
1929.....	2.25	⁵ 1.78	4.03	55.83
1930.....	2.23	⁵ 1.70	3.93	56.74
1931.....	2.22	⁵ 1.54	3.76	59.04
1932.....	2.26	⁵ 1.51	3.57	63.31
1933.....	2.20	⁵ 1.34	3.54	62.15
1934.....	2.15	⁵ 1.75	3.90	55.13
1935.....	2.24	⁵ 1.77	4.01	55.86
1936.....	2.25	⁵ 1.76	4.01	56.11
1937.....	2.17	⁶ 1.81	3.98	54.52
Average, 1928-37.....	2.22	1.66	3.88	57.22
1936.....	2.25	⁷ 1.83	⁷ 4.08	55.15
1937.....	2.17	⁷ 1.94	⁷ 4.11	52.80

¹ Includes lignite, the data on which are compiled by the Bureau of Mines. The expense of selling lignite is not included in these data.

² Interstate Commerce Commission: Freight Commodity Statistics.

³ Average value per ton represents the total sales realization, including the value of coal not sold but used by the producer, divided by the total ascertainable tonnage (except as modified by footnotes).

⁴ Average value at mines, as shown, plus the average freight revenue per ton for the United States as a whole. This total is merely the average car-load cost to all purchasers, wherever located, at rail destinations, and has no significance as to any particular producer, producing field, or rail destination.

⁵ The data for 1928-36, collected by the Bureau of Mines on a voluntary basis, represent the "amount received at the mines f. o. b. cars less the selling expense," including the value of coal not sold but used by the producer, mine fuel, and coal made into coke at the mine, divided by the total number of tons produced.

⁶ Calculated by subtracting the selling cost of \$0.1273 a ton from the Commission figure of \$1.94.

⁷ Data collected by the National Bituminous Coal Commission (now Bituminous Coal Division) include selling expense. Allowing for the inclusion of this item, and reports more numerous and detailed, the two series of data may be considered approximately comparable.

Freight rates are inescapable as an element of consideration in the establishment of prices of coal at the mine, for they bear directly on the market limitations of the individual producing mines and of district groups. Prices on coal from the same mine may be lower on an f. o. b. basis when the coal is shipped to a market to which the freight rate is higher than to a nearby or home market. This absorption of the freight rate has become a fixture in the coal industry. Otherwise, the coal could not compete in distant markets to which other coals move on lower freight rates.

The principal consuming groups and their relative importance to the coal-mining industry in 1937 are as follows:

TABLE 9.—Consumption of bituminous coal, by consuming groups, 1937

Consuming group	Thousands of net tons	Percent of total consumption
General manufacturing.....	¹ 162,961	38.03
Locomotive fuel, class 1 railroads.....	82,067	19.29
Coke (includes 4,927,000 tons beehive).....	74,502	17.39
Domestic and miscellaneous.....	58,717	13.70
Electric power utilities.....	44,766	10.45
Colliery fuel.....	3,052	.71
Bunkers, foreign.....	1,832	.43
Total consumption.....	428,497	100.00
Exports.....	13,145
Consumption and exports.....	441,642
Unaccounted for.....	3,889
Total production.....	445,531

¹ Bureau of the Census, Department of Commerce.

Source: Minerals Yearbook, 1939, p. 773.

Geographical Consumption.

Detailed information on the geographical consumption of bituminous coal has not been compiled since 1929 but there is sufficient data to permit generalizations about such consumption. Of the 162,961,000 tons consumed in 1937 in manufacturing, 38.23 percent was consumed in the Middle Atlantic States of Pennsylvania, New York, and New Jersey; Pennsylvania alone accounted for 25.64 percent, and New York 10.01 percent. The East North Central States⁶ accounted for 36.26 percent, Ohio consuming 12.89 percent. The consumption of bituminous coal for manufacturing in other geographical divisions in 1937 follows: South Atlantic,⁷ 8.79 percent; East South Central,⁸ 6.77 percent; New England,⁹ 4.85 percent; West North Central,¹⁰ 3.08 percent; Mountain,¹¹ 1.59 percent; Pacific,¹² 0.27 percent; and West South Central,¹³ 0.16 percent.

In the larger consuming areas the consumption of railroad locomotive fuel follows the direction of general consumption. Because of its nature, consumption for this purpose cannot be assigned to States.

The bulk of coal consumed in making coke is used in ovens near blast furnaces, foundries, and points of consumption of manufactured gas. Pennsylvania led in such consumption, followed by Ohio, Indiana, New York, Alabama, and other States.

Coal for domestic purposes is consumed chiefly in the more populated of the colder regions, such as the New England,¹⁴ East North Central,¹⁵ West,¹⁶ North Central, and Middle Atlantic States.¹⁷

The larger part of the coal used by electric power utilities is consumed in the East North Central,¹⁵ Middle Atlantic,¹⁷ and South Atlantic¹⁸ States. Of the important consuming States, Pennsylvania is foremost, followed by Illinois, Ohio, New York, Michigan, West Virginia, Massachusetts, New Jersey, Wisconsin, and other States.¹⁹

Colliery fuel is used at various coal mines for the generation of steam and of electric power.

Bituminous coal for foreign bunkers is sold chiefly to vessels at the Atlantic ports of New York, Philadelphia, Baltimore, and Hampton Roads.

OBJECTIVES OF THE COAL ACTS

Against this background, we can now proceed to an analysis of the objectives of the coal acts. The N. R. A. Coal Code sought to increase wages and employment through collective bargaining and through reductions in the number of hours of work per week. The working hours of employees were first put at an average of a 5-day or 40-hour week. Beginning April 1, 1934, a 35-hour week of five 7-hour days became effective. It was estimated by N. R. A. that employment was increased between 8 and 13 percent as a result of the

⁶ Ohio, Illinois, Indiana, Michigan, and Wisconsin.

⁷ Delaware, Maryland, District of Columbia, West Virginia, Virginia, North Carolina, South Carolina, Georgia, and Florida.

⁸ Kentucky, Tennessee, Alabama, and Mississippi.

⁹ Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

¹⁰ Minnesota, Iowa, Missouri, North Dakota, South Dakota, Kansas, and Nebraska.

¹¹ Montana, Idaho, Utah, Wyoming, Colorado, New Mexico, Nevada, and Arizona.

¹² Washington, Oregon, and California.

¹³ Arkansas, Oklahoma, Louisiana, and Texas.

¹⁴ Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

¹⁵ Ohio, Illinois, Indiana, Michigan, and Wisconsin.

¹⁶ Minnesota, Iowa, Missouri, North Dakota, South Dakota, Kansas, and Nebraska.

¹⁷ Pennsylvania, New York, and New Jersey.

¹⁸ Delaware, Maryland, District of Columbia, West Virginia, Virginia, North Carolina, South Carolina, Georgia, and Florida.

¹⁹ Federal Power Commission, *Electric Power Statistics*, 1937, pp. 19-10.

operation of the code. Average annual earnings per mine worker were calculated to have risen by \$419 for the April 1934 to March 1935 period, over the pre-N. R. A. period in May 1933. According to the Bureau of Labor Statistics pay roll index (based on 1929 as 100) the 1934 pay rolls of the bituminous coal industry had risen to an index number of 54.2 percent from the 1932 low of 35.6 percent and the slightly better 37.8 percent of 1933. The 1934 "code" increase over the 1932 depression low amounted to about \$107,000,000.

The code also sought to establish a minimum fair price structure that would support the wage scales and return to the producers their costs less capital charges. This it did to a degree that has already been shown.²⁰

The 1935 act and the present 1937 act were designed to facilitate continuance of wage determination by collective bargaining. Establishment of minimum prices based on costs exclusive of capital charges was to insure the producers' ability to pay the negotiated wage scale. To overcome the 1935 act's unconstitutionality as to provisions for regulation of the machinery and methods of negotiation and employment, the 1937 act, section 9, merely declared it to be the public policy of the United States that—

Employees of producers of coal shall have the right to organize and to bargain collectively as to their hours of labor, wages, and working conditions through representatives of their own choosing, without restraint, coercion, or interference on the part of the producers.

who shall not—

interfere with, restrain, or coerce employees in the exercise of their said rights, nor discharge or discriminate against any employee for the exercise of such rights.

Neither should any employee or applicant for employment be required, as a condition of employment, to join any collective bargaining agency in which the employer has any share of direction or control.

The Bituminous Coal Act of 1937 has as its main purpose the establishing of minimum prices which rest upon a weighted average of total costs. These minimum price provisions are provided in a code.²¹

Producers subscribing to this code are designated as code members, and all coal producers are subject to an excise tax of 1 cent per ton. Nonsubscribing producers are subject to an additional tax of 19½ per cent of the sale price at the mine. Code members are forbidden to sell coal at less than the properly established minimum prices, and penalties are prescribed for violation of such prices and other provisions of the code.

The prime interest of this study revolves around the standards prescribed and the application of these standards or their expansion and interpretation by the Coal Commission set up to administer the act. It is necessary to keep in mind a picture of the administrative machinery set up, the principal procedural steps required, and the Commission's struggles to date to establish prices. Such a picture is drawn in the next few pages, in the course of which the act's provision of standards will be cited, and following which the meaning and application of these standards will be taken up.

For the first time in Federal regulatory enactments (except as provided in the Bituminous Coal Conservation Act of 1935), a consumers'

²⁰ See p. 257.

²¹ Sec. 4.

counsel was provided with considerable power to appear in all proceedings before the Coal Commission for the purpose of representing the interest of the coal consuming public. In such proceedings, the Consumers' Counsel has the right to offer any relevant testimony, examine and cross-examine witnesses and parties thereto, and to have a subpoena or other process of the Commission issued in his behalf. The Counsel is to certify to the Commission a request for information or for an investigation whenever he finds that the interests of the consuming public so warrant. Thereupon the Commission is to furnish the information or conduct the investigation promptly and place the results thereof at the Counsel's disposal.

The Counsel is to conduct such independent investigation of matters relative to the coal industry and the administration of the act as he deems necessary to enable him properly to represent the consuming public in any proceeding before the Commission.²²

Both the Commission and the Consumers' Counsel are authorized to make and prosecute complaints to the Interstate Commerce Commission with respect to "rates, charges, tariffs, and practices relating to the transportation of coal." The Interstate Commerce Commission is directed to notify the Coal Commission and the Consumers' Counsel of complaints, filed by others, which involve the transportation of coal; and, upon their application, to permit them to appear and be heard.²³

The Counsel is authorized "to appoint and fix the compensation and duties of necessary professional, clerical, and other assistants." All employees (except a clerk to the Counsel, attorneys, special agents, and experts) are to be appointed and their compensation fixed according to the civil-service laws and the Classification Act of 1923, as amended. The Counsel may make "such expenditures as may be necessary for the performance of the duties vested in him."²⁴

Neither the act nor the Reorganization Plan No. II, ordered by the President in the summer of 1939, which abolished the Bituminous Coal Commission and established the Bituminous Coal Division in the Department of the Interior, provides specifically for the appearance of individual consumers in proceedings before the Coal Commission or Coal Division, such consumers being represented by the Consumers' Counsel or the Consumers' Counsel Division. Nevertheless, in practice the Coal Commission permitted and the Coal Division permits consumers to appear in such proceedings.

The act established the Office of Consumers' Counsel in the Department of the Interior but directed the Consumers' Counsel, a Presidential appointee, to make his annual report directly to Congress. Under the second reorganization plan (effective July 1, 1939), the Office of Consumers' Counsel became the Consumers' Counsel Division in the Office of the Solicitor, Department of the Interior. Otherwise, the agency representing the coal consumer remains substantially the same.

ADMINISTRATIVE MACHINERY OF THE 1937 ACT

The act sets up a commission of seven men, two with past experience as mine workers, two with experience as producers, and three representing the public—none with any financial interest in the mining,

²² Sec. 2 (b).

²³ Sec. 16.

²⁴ Sec. 2 (b) (3).

transportation, or sale of or in the manufacture of equipment for, coal, oil, or gas, or in the production, transmission, or sale of hydroelectric power or power equipment.

The Commission shall not engage in any other occupation. The Commission is clothed with administrative and procedural authority necessary to its functioning. This will not be detailed here. Under the President's reorganization plan, the Commission was abolished as of July 1, 1939, and its power, duties, staff, etc., were transferred to the Bituminous Coal Division of the Department of the Interior.

It is important to note the establishment by the act of 23 producing districts,²⁵ 10 minimum price areas,²⁶ and the direction that for each district the Commission shall establish a statistical bureau to be operated as an agency of the Commission.²⁶ (Under the 1935 act, the statistical bureaus were permissive adjuncts to the district boards.)

From a legislative point of view, the concept of producing districts dates from 1932, when Representative Lewis, perhaps influenced by the British Coal Act of 1930, introduced his bill, H. R. 9924, which provided for 27 bituminous coal districts and 3 anthracite districts. A board for each district was to allocate production quotas to each mine therein. The 27 districts for bituminous coal were based upon geographical and competitive factors already recognized in the industry—for example, wage districts of the United Mine Workers of America, political boundaries, freight rates, and qualities of coal. This division of the coal fields into districts, modified from time to time with respect to district boundaries, was maintained in subsequent regulatory bills, and was put into practice in the subdivisions under the N. R. A. Code of Fair Competition for the Bituminous Coal Industry. In later proposals the districts were numbered.

The concept of price areas seems to have originated under the N. R. A. Code, which provided for 5 divisional code authorities, the first 4 of which correspond roughly to Price Areas 1-5 in the 1937 act. Division 5 of the N. R. A. Code was the equivalent of Price Areas 6-10. Under the N. R. A. Code each division consisted of several somewhat similar competing subdivisions grouped together primarily for purposes of administration.²⁷ The first Guffey bill²⁸ provided for 24 districts but price areas were not specifically included until the introduction of Senator Neely's amendment of June 4, 1935, to S. 2481, providing therein for grouping the proposed 21 producing districts in 9 minimum price areas.

In each of the present 23 producing districts, the act provides that there shall be organized a district board of code members,²⁹ the boards to consist of not fewer than 3 or more than 17 members. Producer members shall be of an even number, and constitute all but one of the board—the other one shall be selected by the predominant labor organization of the district. One half the board's producer members are chosen by a numerical majority of code members in the district, the other half by votes proportioned to annual production of each code member. The Commission is given power, on findings and after due notice and hearing, to remove any member for inefficiency, willful neglect of duty or malfeasance. The expenses of district boards arising out of the duties imposed by the act are to be supported by

²⁵ Sec. 4-I (a).

²⁶ Sec. 4-II (a).

²⁷ Art. VII of the N. R. A. Code of Fair Competition for the Bituminous Coal Industry.

²⁸ S. 1417, January 24, 1935.

²⁹ Sec. 4-I (a).

assessments on code members, subject to approval by the Commission, and collectible by the district board by an action in any court of competent jurisdiction. Boards are given power to adopt by-laws subject to the Commission's approval, to employ such officers and other persons as are necessary, and to fix the compensation of these persons, but the board members themselves serve without compensation and are reimbursed only for reasonable expenses.

The 10 minimum price areas are for convenience in the establishment of costs and prices. No administrative personnel is provided for price area units, and none has been established. The Commission has power to change, by its order, the boundaries of any district or price area if it finds, after hearing, that present boundaries make price establishment in compliance with all the prescribed standards "substantially impracticable," and that a change of boundary or consolidation or division would make such price establishment more practicable. The Commission, by order effective July 29, 1939, found the coal produced in North and South Dakota (district 21, or minimum price area 8) to be lignite as defined in section 17 (b) of the act, and therefore excluded from its operation. Hence there are now 22 producing districts subject to the act.

Statistical bureaus were early established by the Commission, one in each producing district. Thus there were 22 such bureaus operating as agencies of the Commission, each with a headquarters office within its district, each with a manager (provided in the act), a director of statistics, and a staff. They received, edited, tabulated, and forwarded to the Washington headquarters the cost reports for 1936 and the months of 1937 used as material for the determination of weighted average costs. They also performed other routine and special statistical duties, including the preparation for analysis of copies of all contracts, credit memoranda, and invoices, the filing of which is required under section 4-II (a). "All such records shall be held by the statistical bureau as the confidential records of the code member filing such information."

It should be noted that the act does not require the Commission to establish a statistical bureau in each producing district. The act prescribes the establishment of the bureau "for each district." Unquestionably, economy would result from the maintenance of a smaller number of bureaus, located at strategic points, each shouldered with a volume of work that could employ a highly-gearred staff and mechanical equipment with much less overhead expense and greater efficiency. No doubt broader political considerations, both within and without the industry, have made the present set-up expedient, if not economical.³⁰

GENERAL PROCEDURE AND STANDARDS PROVIDED FOR PRICE ESTABLISHMENT

Steps in Price Establishment.

The act prescribes five major steps in price establishment:

1. Determination of the weighted average cost shall be made (a) for each district, for 1936, adjusted to reflect "any change or changes which may have been established since January 1, 1936," and (b)

³⁰ In 1939 the statistical bureaus for districts 16, 17, 18, and were consolidated. Several consolidations of statistical bureaus or field offices recently (1940) have been effected. The Coal Division announced in June 1940 that six more of its field offices were to be closed and their work transferred to the five remaining statistical bureaus.

for each minimum price area. "The weighted average figures of total cost * * * shall be available to the public. Said weighted average of the total costs shall be taken as the basis, to be effective until changed by the Commission, for the proposal and establishment of minimum prices." Upon a showing of a change thereafter in weighted average cost in excess of 2 cents per ton in the minimum price area, exclusive of seasonal changes, the Commission shall increase or decrease the minimum prices accordingly.

2. Each district board shall, from time to time on its own motion or when directed by the Commission, propose minimum prices free on board transportation facilities at the mines for kinds, qualities, and sizes of coal produced in said district, and classification of coal and price variations as to mines, consuming market areas, values as to uses and seasonal demand. Such prices—

*shall be proposed so as to yield a return per net ton for each district in a minimum price area * * * equal as nearly as may be to the weighted average of the total costs, per net ton, determined as hereinafter provided, of the tonnage of such minimum price area.*

These proposed prices shall—

Reflect, as nearly as possible, the relative market value of the various kinds, qualities and sizes of coal.

Be just and equitable as between producers within the district.

Have due regard to the interests of the consuming public.³¹

The Commission is to approve procedural rules and regulations for these proposals.

Thus, four standards must be complied with in the initial proposal of prices by district boards. These proposals are submitted with all supporting data (including the factors used in determining the price relationships) for approval, disapproval, or modification by the Commission. Whereupon the schedule of prices approved by the Commission shall serve as the basis for coordination, provided that—

*All minimum prices proposed for any kind, quality, or size of coal for shipment into any consuming market area shall be just and equitable as between producers within the district.³¹ * * **

No minimum price shall be proposed that permits dumping.³¹

Here the prices approved by the Commission for coordination are required to comply with two standards.

3. Proposals shall be made by district boards for approval, disapproval or modification by the Commission, of reasonable rules and regulations incidental to the sale and distribution of coal by code members within the district. As approved, these proposed marketing rules and regulations are to be "coordinated" among the district boards and resubmitted for final approval, disapproval, or modification by the Commission.³² These rules shall—

*Not be inconsistent with the requirements of this section (4-II (a)). * * **

Conform to the standards of fair competition hereinafter established (referring to sec. 4-II (i) 1 to 13, inclusive, which specifically describe unfair methods of competition that are violations of the code).

4. Coordination of the previously proposed prices and rules and regulations shall be effected by the district boards (steps 2 and 3 above) in common consuming market areas upon a fair competitive basis, taking into account, among other factors, "the various kinds, qualities, and sizes of coal." Prices thus coordinated "for any kind,

³¹ Sec. 4-II (a). In this and the following citations, italics are the authors'.

³² Sec. 4-II (b).

quality, or size of coal for shipment into any common consuming market area shall—

Be just and equitable, and not unduly prejudicial or preferential, as between and among districts.

*Reflect, as nearly as possible, the relative market values, at points of delivery in each common consuming market area, of the various kinds, qualities, and sizes of coal produced in the various districts, taking into account values as to uses, seasonal demand, transportation methods and charges and their effect upon a reasonable opportunity to compete on a fair basis, and the competitive relationships between coal and other forms of fuel and energy; * * **

*Preserve as nearly as may be existing fair competitive opportunities. * * **

Not, as to any district, reduce or increase the return per net ton upon all the coal produced therein below or above the minimum return as provided in subsection (a) of this section (refer to step 2 above) by an amount greater than necessary to accomplish such coordination, to the end that the return per net ton upon the entire tonnage of the minimum price area shall approximate the weighted average of the total cost per net ton * * * of such minimum price area.³³

The coordinated prices must meet the requirements of these four express standards.

5. After such coordination has taken place, the resulting prices and rules and regulations are to be submitted to the Commission, which shall—

thereupon establish, and from time to time, upon complaint or its own motion, review and revise the effective minimum prices and rules and regulations in accordance with the standards set forth in subsections (a) and (b).³⁴

All district board rules, regulations, determinations, and promulgations are subject to review by the Commission upon appeal by any producer, and on showing of cause are amenable to the order of the Commission.

Should any district board "fail for any reason to take action authorized or required by this act, then the Commission may take such action in lieu of the district board."³⁵ This important provision was invoked by the Commission in its first price proceedings in 1937, when the district boards found it impossible to coordinate many price situations. The Commission performed the function of coordination for them, holding a series of closed hearings at which the respective district boards involved in disputes over the coordination of prices to a common consuming market offered facts, viewpoints, and recommendations. The Commission again had to take over coordination in its second attempt at price establishment.³⁶

In summary, the five steps in the establishment of minimum prices are—

- (1) Determination by the Commission of weighted average costs for each minimum price area.
- (2) Proposal of initial prices by district boards.
- (3) Proposal by district boards of marketing rules and regulations.
- (4) On approval of initial price schedules and marketing rules by the Commission, coordination by district boards of both prices and rules for common consuming market areas.
- (5) Establishment of minimum prices and marketing rules and regulations by the Commission.

The first prices established for all districts (except District 21, North and South Dakota), effective December 16, 1937, were revoked

³³ Ibid.

³⁴ Sec. 4-II (a) and (b).

³⁵ Sec. 6 (a).

³⁶ Orders No. 267 and No. 269 (March 20, 1939) and Order No. 272 (April 13, 1939).

on February 25, 1938,³⁷ after court actions resulted in many injunctions. In the following section the procedure followed by the Commission in its abortive first establishment of prices is described briefly. No endeavor is made here to discover or to appraise either the standards used or the effects of the prices that were fixed for a short time.

The 1937 Price Determination.

Immediately after the act of 1937 became law, the Commission proceeded to determine the weighted average of the total costs in each minimum price area, publicly announcing the respective averages, as required. No public hearings were held, and data underlying the weighted average costs, upon which prices were to rest, were kept in absolute confidence by the Commission. District boards submitted initially proposed prices which, after modification as a result of producer protests, were returned to the respective district boards for coordination. Such coordination was attempted and agreement reached in some markets, but the Commission ultimately took over the job upon the failure of district boards to complete it.

Obviously no public showing was made by the Commission as to the degree of compliance with prescribed standards, and it is therefore not possible to state whether the price schedules complied with the standards prescribed by the act. The prices did represent increases over those prevailing just previously; in some cases such increases ranged from 25 cents to over \$1. Previously, the Commission had announced in a formal statement on September 28, 1937, that it would hold a public hearing which would permit examination and cross-examination of witnesses and basic data prior to the establishment of minimum prices. Nevertheless, this agreement was renounced without warning to interested parties, and prices were established without public hearings or making public the basic data which the Commission was required to have in support of its price schedule. According to the Consumers' Counsel, the Commission, at the solicitation of Consumers' Counsel, subsequently "agreed to hold a hearing on December 21, 1937, at which time it would place on public record the facts necessary to substantiate the minimum prices established by the Commission," but no such hearing was held and the Commission "refused to proceed to substantiate prices."³⁸

Interested consumers appealed to the courts and numerous injunctions were granted. Ultimately the Commission revoked the entire price schedule.³⁹

It is clear that the establishment of prices on a basic commodity in such widespread use, without submitting them to the interested parties, particularly those who would be compelled to pay the minimum prices representing a general increase over levels prevailing just previously, and without supporting them publicly with the underlying data to show they met all required standards, could not expect public support. The hasty procedure was doubtless a response to great pressure from several directions, including producers and labor, urging early price establishment.

This first experience was disappointing both to the industry and to consumers who were put to great expense in following the procedure

³⁷ Order No. 230 (February 24, 1938).

³⁸ Annual Report of Consumers' Counsel, 1938, p. 4.

³⁹ Order No. 230 (Feb. 24, 1938).

through successive stages, as well as to the Government. It was expensive to all concerned, and there was unfavorable comment in the press.

The Second Price Determination, 1938-40.

With the revocation on February 25, 1938, of its first price schedules, "the Commission has proceeded in accordance with the provisions of the law as interpreted by it * * *. There may be legal questions which will arise, * * * as there always will arise legal questions," says the 1938 Annual Report of Consumers' Counsel of the Commission, but in its opinion "there can be no question as to the sincerity of purpose of the present (1938) Commission." After the first price establishment failed, the Commission's chairman resigned and no successor was appointed, the six remaining Commissioners electing a new chairman and continuing their duties until the President's reorganization plan abolished their offices and transferred the entire administration of the act to the Secretary of the Interior as of July 1, 1939.

In brief retrospect, the second price procedure up to date (June 1940) has gone through the following stages:

(1) The weighted average cost has been determined for each minimum price area. First, "legislative" or informative hearings were held, where all data helpful to the Commission were introduced; later, all individual cost reports for 1936 and those for 1937 used by the respective district boards in adjusting 1936 costs (to reflect changes through 1937) were made available for inspection by interested parties. Final "judicial" hearings were scheduled by the Commission with the previous record made a part of the record of these hearings, and with rights of examination, cross-examination, motion to strike, and introduction of affirmative evidence. "Findings of Fact and Conclusions" were made by the Commission in May and June 1939, determining the weighted average cost for each minimum price area, which under the act is the figure which the net return per ton, from minimum prices later established, must approximate.

(2) Initial prices have been proposed by district boards, submitted to the Commission, and returned to district boards after approval or modification as a basis for coordination. This is step 2, as prescribed.

(3) Marketing rules and regulations proposed by district boards have been submitted to the Commission for approval or modification and returned to district boards for coordination. This is step 3, as prescribed. (Steps 2 and 3 do not necessarily follow in numerical sequence.)

(4) Coordination of minimum prices in common consuming markets was attempted by the district boards, but they were unable to accomplish it; hence the Commission took over this function, as directed by the act. Final public hearings were begun in May 1939, just prior to the transfer of the Commission's functions to the Bituminous Coal Division of the Department of the Interior, under which these hearings were continued until their completion on January 20, 1940.

The three Trial Examiners have made their report on the final hearings ("Proposed Findings of Fact, Conclusions, and Recommendations of Trial Examiners"), and have recommended to Director Gray f. o. b. mine prices for all coal-producing districts (except District 21, which produces lignite and has been held outside the scope of the act).

The prices recommended by the examiners will give an estimated minimum national average price of \$2.072 per ton, representing an increase of about 11 cents a ton above the average of the unregulated prices of 1937, the last period for which figures are available.⁴⁰ The recommended prices for some areas are about the same as the levels prevailing in these areas recently, and higher than recent prices in the case of other areas. These recommended prices are in general lower than the minimum prices temporarily in effect under the Commission in early 1938 and also below the minima established under the N. R. A. Code in 1933. It is understood that July 1940 is anticipated as the month in which minimum prices will be established.⁴¹

Since the establishment of minimum prices is the prime objective under the act, no special note will be made here of the Commission's duties apart from those bearing directly on prices. It should be observed, however, that as part of its price-fixing function the Commission is directed to prescribe "due and reasonable maximum discounts or price allowances" permitted to be made by code members to wholesale distributors "who purchase coal for resale and resell it in not less than cargo or railroad carload lots," and that such distributors must maintain and observe the prices and marketing rules established by the Commission.⁴² In other words, distributors must not, on resale, cut below effective minimum prices f. o. b. mines, nor exceed maximum prices if any are in effect. The destination price in any case must not be less than the effective minimum price f. o. b. mine, plus the effective freight rate applying from the point of shipment to the destination. This report does not consider the matter of standards for distributors' discounts.

STANDARDS FOR PRICE DETERMINATION IN ACTUAL OPERATION

The standards as prescribed in the act are already set forth and emphasized in the foregoing outline of "procedure provided for price establishment." We now consider these standards, one by one. An attempt will be made to explain their meaning, describe their purpose, their application by the Commission, and major difficulties encountered.

The Cost Standard and Its Determination.

The Commission is directed to establish minimum prices, by steps already described, which will return to the producers within a given price area an amount per ton approximating the weighted average cost of that minimum price area. In other words, it may be said that to comply with the act in this particular, the Commission must show, for each price area, that—

- (1) It has determined the weighted average cost per ton as provided in the act, and
- (2) That minimum prices proposed to be established will return, on the total production of each of the respective price areas, an average per ton approximating its weighted average cost per ton as determined.

The weighted average cost determined by findings dated June 14, 1939, for minimum price area 1 (districts 1 to 8, inclusive); was \$2.128

⁴⁰ Department of the Interior Information Service, Press Release No. P. N. 9809 (April 16, 1940).

⁴¹ Department of the Interior Information Service, Press Release No. P. N. 107,008, C. D. 80 (July 5, 1940).

⁴² On June 20, 1940, the Coal Division issued an order prescribing maximum discounts to distributors.

per ton. Minimum prices established for producing mines in price area 1 must be shown to represent a return on all the coal produced in that price area averaging approximately \$2.128 per ton.

Thus, the act seeks to attain its prime objectives—prices that insure—

- (1) To labor: the employers' ability to pay contract wages.
- (2) To the industry: an end to its heavy annual net losses, and some assurance of greater economic stability.
- (3) To the consumer: reasonable minimum prices which will cover costs of production on a stable basis.

The approximation of average return to average cost presents some practical difficulties. The term "approximate" must be interpreted with some flexibility. Prices must also "preserve as nearly as may be existing fair competitive opportunities," which means that the coals from different districts customarily reaching a "common consuming market" must be priced so as to retain, in the main, their usual past relationships as modified by the word "fair." The act recognizes this necessity by providing that the prices first proposed by district boards for later "coordination" with other districts in markets where they compete shall reflect as nearly as possible "the relative market value" of the various kinds, qualities, and sizes of coal.

One tangible measure of relative market value available to the Commission is the record of past price relationships, but this is far from satisfactory by itself. Moreover, in the process of coordination, to meet the important provision that average return from prices must approximate average cost in each minimum price area, many modifications and concessions from the established price relationships are inevitable. After the adoption of the new schedule of minimum prices, which represents increases generally over the existing below-cost levels, many shifts will doubtless occur so that the present proportions of the sales of the various coals and various sizes will not continue to hold. Obviously the actual return over a period of months or a year cannot be predicted with perfect accuracy. Should the prices promise a return per ton in minimum price area 1 within five, six, or seven cents of the weighted average cost, on the basis of past distribution, such return might be considered an approximation of cost, under all the difficulties incident to setting up a schedule of hundreds of thousands of prices. Where particular prices increase, the shifts of consumers to different sources of supply, even to different districts and to different sizes of coal as a matter of good business economy, to escape paying the full price increase represented by continuing their old connections, may well produce a change in the average future return in a price area as compared with the return that would have resulted had the old trade relationships remained entirely undisturbed. Although the Commission cannot accurately predict all future shifts in demand from size to size, mine to mine, or district to district, or their effect on the average, it can use the tonnage movement of the past with judgment as to the effects of any probable shift, as a test of the prices now proposed for establishment, to show substantial compliance with the prescribed approximation of average return and average cost.⁴³

⁴³See appendix H, for the actual procedure of the Coal Division on this matter.

Recognizing the need in actual determination of prices for complete data on distribution showing the tons of each size of coal moved by every mine to each destination or market, the Commission, in the spring of 1938, required the filing of such data, and traced the movement of coal transhipped over the lakes and coastwise, in river movements, etc., to its final destination. On a special form it also obtained a similar record of all railroad purchases for locomotive and other use. For the first time in history, a record exists of the tonnage distribution of all sizes of coal from all mines to all markets. The period covered is the year 1937. Thus the Commission is able to show the approximation of estimated return from the price schedule for a district to the weighted average cost in a minimum price area, barring unpredictable shifts that may occur in the future.

As already indicated, the act does not prescribe the form in which costs shall be assembled. It does prescribe ⁴⁴ that each district board shall determine—

from cost data submitted by the proper statistical bureau of the Commission, the weighted average of the total costs of the ascertainable tonnage produced in the district in the calendar year 1936.

It also prescribes, in the same section, that the computation of the total costs shall include the cost of—

- (1) Labor.
- (2) Supplies.
- (3) Power.
- (4) Taxes, insurance, workmen's compensation, royalties, depreciation and depletion (as determined by the Bureau of Internal Revenue in the computation of the Federal income tax), and all other direct expenses of production, Coal Operators' Association dues, district board assessments for board operating expenses only levied under the code.
- (5) Reasonable costs of selling.
- (6) Cost of administration.

These cost items are here grouped in the above manner because the cost reports required by the Commission from all mines followed generally such a grouping. (A special form was devised for use by small mines with a daily capacity under 50 tons, the returns from which were of slight influence in the total.)

The "Findings of Fact and Conclusions of the Commission" determining the weighted average cost for price area 1 (June 14, 1939), reviews in full detail the steps taken by the Commission. A short sketch of the organization and technique employed will suffice for present purposes.

Cost data were obtained on standard forms and handled under rules and with directed technique that insured substantial uniformity in all districts, under the general supervision of the Commission's Division of Research and Statistics, which directed the work of the 22 statistical bureaus. These cost forms were an outgrowth of earlier cost forms, and closely resemble those prepared by the first Coal Commission under the 1935 act, which in turn were very much like the forms in use by the National Recovery Administration, 1933 to 1935. Expert knowledge and judgment of coal industry representatives were very helpful: the N. R. A., the first Coal Commission, and

⁴⁴ Sec. 4-II (a).

the present Commission availed themselves of such counsel. Again it is to be noted that the major groups of items used in the present cost forms followed the previously quoted list provided in the act. Some of the items on the cost form were broken down into detail helpful to the producers in filling out the form. The mines had become accustomed to filing substantially these same details since November 1933 under the N. R. A., except for temporary periods of nonregulation. We shall reserve until later a discussion of the criticisms and attacks upon the cost form, and its possible weaknesses.

The Commission, through its Division of Statistics and statistical bureaus, obtained sworn cost reports in detailed form on Cost Form No. 1-A for the calendar year 1936, in response to its Order 15, July 15, 1937. Form No. 1 was for mines with a daily capacity of more than 50 tons; No. 1-A for those under 50 tons. These reports were filed by producers with the statistical bureaus of their respective districts. The bureaus examined each report as it came in; secured from many reporting mines corrections of inaccuracies or omissions discovered; secured explanations of items which on their face seemed to them very high or otherwise questionable; verified the reports for mathematical accuracy; and tabulated the reports in two general classifications, "commercial" and "captive," in accordance with pertinent subdistrict arrangements, ready for the making of composite cost statements.

In its "Findings of Fact" as to the weighted average cost for price area 1 the Commission ⁴⁵ says, "We construe the phrase 'ascertainable tonnage' to include the entire tonnage of both 'commercial mines' and 'captive mines' of code members and noncode members, as these terms are hereinafter defined." The latter definition ⁴⁶ indicates that mines were classified as captive whose report showed that "exempt" coal plus "mine fuel" plus "controlled" sales constituted 40 percent or more of their output. Controlled sales are defined in the cost form instructions as coal sold to a consumer (a) wholly or by control a parent or subsidiary of the producer, (b) owned or controlled by a third owner who stands in similar relationship to the producer, or (c) where the sale is for any reason noncompetitive.

Mines which were idle the entire period contributed no production to the "ascertainable tonnage" under the Commission's construction, and were therefore excluded from the cost tabulations. Having listed all the mines determined upon for inclusion, their tonnages and costs were tabulated and totaled. The weighted average was computed by dividing the total dollars of cost by the total tons produced.

An item calling for the net debit or credit from operation of company houses "including fixed charges thereon, less income," appeared on the 1935 Commission form, but at a conference in June 1937, between members of the Commission staff and representatives of district boards, it was "decided that company house expense less income should be excluded," and this item does not appear on the present cost form. In its "Findings and Conclusions" regarding weighted average cost, the Commission found that Cost Forms No. 1 (1936) and No. 2 (1937) are adequately designed for the purpose of obtaining the costs of producing and selling bituminous coal.

All correspondence of the statistical bureau with reporting mines questioning items as reported, together with replies and such revised

⁴⁵ Findings of Fact and Conclusions of the Commission for price area 1, p. 11.

⁴⁶ Ibid., p. 20.

reports as resulted, were attached to the original reports which were exhibited for the inspection of interested parties.

The reports for the year 1936 and the last 9 months of 1937 were later forwarded to Washington, together with the tabulations of these, where they were subjected to a check for mathematical accuracy. The Division of Research and Statistics also rechecked all individual reports in what they called a "test audit." This resulted in some changes and corrections which were read into the record, notably the removal of development expenses of new mines. Such development expenses are properly chargeable to capital account and "not properly chargeable to the cost of production within the meaning of the act."⁴⁷

The office of the Consumers' Counsel in this initial investigation also made spot checks "to satisfy itself on behalf of the consumers that the weighted average costs as computed" were "statistically accurate and fairly represented average costs. The Consumers' Counsel found that the posting and mathematical work of the statistical bureaus was generally accurate. Such errors in posting or computations as were found were comparatively few and of no consequence in their effect on the district totals."

The Consumers' Counsel also questioned a number of items reported which appeared to be high or of questionable application. The commission investigated these items by inquiry to the reporting mines, and as a result most of them were satisfactorily explained. Some further revisions resulted, however, and were read into the record. The changes were accepted by the district boards.

Such reported expenses as "interest" on bonds or other borrowed capital (not listed as costs under the act), "bad debts," "trucking" or other transportation charges not incident to production cost, and discounts allowed for cash, were ruled not proper charges to cost for this purpose, and were excluded from the computations.

"In the case of two mines in district No. 2 which were queried by the Consumers' Counsel, the commission finds that the reduction of these (administrative) items to the district average is proper." This was the only case so handled in price area No. 1. The two mines belonged to the same company, which "stated that in view of surrounding circumstances, the cost indicated was excessive and should not be used in determining the weighted average of the district."

The 1936 summary costs for each district were submitted to the district boards for their use in adjusting them to care for changes established since January 1, 1936. The results of the "test audit" and other recommended revisions which were read into the record were given effect in connection with the adjustments made by district boards.

It has been noted that the Commission also summarized and averaged the costs for the last 9 months of 1937. This was done to help the district boards "to adjust the weighted average of the total 1936 costs as may be necessary to give effect to * * * any changes substantially affecting costs, exclusive of seasonal changes, so as to reflect as accurately as possible any change or changes which may have become effective since January 1, 1936." Thus actual cost experience was made available for district boards to test their adjustments of the 1936 costs. The first 3 months of 1937 were not included,

⁴⁷ Ibid., p. 21.

since "the experience represented by these 3 months was essentially like that of 1936 on the wage scale then in effect." The last 9 months represented an experience under a higher wage scale effective on April 1, 1937. Constant reference to actual cost experience in this period was deemed essential to intelligent adjustment of 1936 costs. Official cost data for the first 3 months of 1938 were not available, but tests showed they would for most districts make little difference in the costs for the 9 months period, which the Commission concluded might be "taken as reasonably representative of the full 12 months, on the present wage scale, from April 1937 to March 1938 for all districts in price area No. 1 except district No. 5."⁴⁸ As to that district, a conspicuously higher monthly production in the first quarter of 1938 than in the last 9 months of 1937, a temporary variant rather than a permanent upswing, "points to the necessity of downward adjustment of its 9 months average."

Preliminary composite reports of the available 1937 cost returns were first sent to district boards in April 1938, and on May 30 complete summaries were transmitted, incorporating late returns and the results of the "test audit."

There was introduced in evidence a series of uniform reports reflecting additional adjustments to the 1937 costs resulting from (1) the increase on January 1, 1938, of the Federal unemployment tax from 2 to 3 percent, and (2) from the full incidence of the Coal Act tax.

In certain districts, additional adjustments were made by district boards to cover changes resulting from their specific conditions. Such an increase was one recommended by district No. 2 to cover changes in the Pennsylvania State mining law, effective January 1, 1938. Because the estimated increase could not be measured with any degree of accuracy, without a more complete record of actual experience, the commission decided "the evidence does not warrant increasing the costs" on account of this change in the State law.

The Commission first set December 15, 1938, as the date "on and after" which individual mine reports for price areas No. 1, No. 2, No. 3, and No. 5 would be available for inspection by interested parties. Litigation seeking to prevent public exhibition of individual reports caused this inspection period to be delayed, and a second notice set February 6, 1939. Hearings were actually resumed on March 6, 1939, and adjourned. Final judicial hearings took place shortly thereafter.

The foregoing description of the Commission's procedure applies generally to all districts.

The details, figures involved, exceptional conditions applying to a certain few districts, the adjustments proposed by the district boards, and the considerations underlying them, may be found in the "Findings of Fact and Conclusions" of the Commission for each price area.

The weighted average costs for 1936, as adjusted and determined by the Commission in its "Findings," are as follows:

Price area 1	\$2. 128	Price area 6	\$2. 7389
2	1. 7622	7	2. 1691
3	2. 4382	9	1. 4851
4	3. 608	10	3. 2247
5	2. 0392		

⁴⁸ Ibid., p. 26.

It is almost general knowledge that costs of production may vary materially, not only between coal fields and mines within a field, but even within the same mine as varying physical conditions are encountered.

Even more general is the knowledge that there are no standard tolerances by which it may be determined whether a certain figure of cost, or a certain item of cost, is on its face definitely high or low in the sense of being questionable as to accuracy or propriety. All this was brought out by expert testimony during the cost hearings and in the Findings of Fact and Conclusions of the Commission for price area 1.

The record contains certain conclusions of the Commission which assume the importance of "standards" by interpretation or ruling. Some of these should be borne in mind:

(1) Cost is to be determined on a strictly f. o. b. wholesale, cash basis. Items shown in table 1 of the "Findings" for each district as having been excluded cover:

- (a) Cost of trucking coal to customers.
- (b) Cost of rail transportation to a point from which the selling price is not on an f. o. b. mine basis.
- (c) Cost of retailing (particularly by a mine which not only sells in railroad carload lots, but also retails direct from the mine).
- (d) Cost of credit (bad debts and cash discounts).

(2) Cost of "ascertainable tonnage" is construed to include the "entire" tonnage of both "commercial mines" and "captive mines" of code members and noncode members.

(3) Costs are to be exclusive of capital expense (deduction was made of development expenses, interest, and dividends as not properly chargeable to cost of production).

(4) Discounts to wholesalers should be included in the cost.

With respect to (1) above, there has been little disagreement.

With respect to (2) there was considerable criticism, evidenced through cross-examination, of the Commission's position in (a) its tentative cost findings that "the judgment of the marketing experts that the actual costs of selling coal commercially, as reported, are the best indication of the reasonable costs of selling such coal, is entitled to great weight," and (b) the apparent intention to use the "tons sold" as a divisor into the total cost of selling coal commercially, then adding the result to the per ton cost of all other items obtained by dividing total tons produced into the total dollars of such other costs. Much argument occurred off the record, opposing schools of thought contending that—

- (1) average cost obtained with "total" tons produced as a divisor could not represent the average cost of selling, but something less than that;
- (2) average cost of selling obtained with only tons sold commercially as a divisor, would not produce a total weighted average of the total cost of the "ascertainable tonnage," as required by the act.

The Commission held that the total ascertainable tonnage must be used throughout as the divisor for total dollars of cost.

Selling Costs.

Parties at the hearings attempted to bring out as an error the Commission's acceptance of selling costs as reported, on the ground that commissions reported paid by mines which sold through agencies or distributors, where there was a mutual financial interest, would include profits or some unknown element of profit. Testimony in the record was to the effect that where such affiliations exist, the commissions charged are "commonly substantially the same for affiliated and non-affiliated business and that they are comparable to the commissions of independent distributors." No evidence was adduced to show that the commission charged on affiliated business was unreasonable or unduly large in relation to the services performed. The Commission found "no cause to exclude them from the computation of the reasonable costs of selling coal."

With respect to (4) as it appears in the record, an attempt was made to show that the inclusion of discounts allowed by producers to wholesalers was an error on the ground that discounts are a reduction of income rather than a cost.

The "Cost Findings" state that "a large part of the national supply (of coal) is sold through independent wholesalers or jobbers." They go on to say that "if expenses attached to this method of selling are excluded from consideration * * * the costs will be fragmentary and incomplete * * *. Such compensation to the wholesaler is a legitimate charge to the producer's cost, accompanied by a corresponding credit to his realization. The Commission, therefore, finds that discounts allowed by producers to wholesalers should be included in the cost wherever known." To do otherwise would produce selling cost averages including the sales expenses of direct-selling producers and the commissions paid by producers who sell through sales agents, but inconsistently excluding allowances or discounts made by producers to wholesale distributors who perform the sales function and act as a sales department for them. The average realization from sales is computed including all selling expenses. This necessitates the inclusion of commissions paid agents and discounts allowed to wholesalers.

The basis for determination of selling costs has been a particular subject of attack. The act, when listing those items which were to be included in cost ascertainment, modified only one item, and that item was selling cost—"reasonable costs of selling." Many expenses have crept into selling cost through the years, some of which are taken for granted as necessary, but many of which are not really necessary—and others have not been proper "costs" at all. It should be pointed out that contributions and donations to charity are not a proper charge to costs upon which to rest prices regulated by a public agency. Entertainment is another item in the same category—perhaps a necessity arising out of competition, but in the opinion of the authors not a reasonable expense of selling.

Affiliations between producers and their selling companies are common. In many instances, the selling company is a child of the producer's membership in a "marketing agency," which requires the subagent to do the actual selling; while the marketing agency acts more as a price-and-market-stabilizing and promoting agency for the coals of its members. Undoubtedly, the commissions paid to affiliated selling companies often represent an element of profit. To that

extent, the amount of which is at present unknown, the selling costs reported by such producing affiliates represent not only costs, but some profit. (On the other hand, the reported costs used by the Commission in its present findings fail to represent the actual selling costs by whatever amount of "discounts and allowances to wholesalers" were omitted. This amount is known to be considerable, but no acceptable evidence was presented to enable a finding as to the amount. The custom of many producers treating such sales as net transactions in their records accounts for their inability to include such discounts to wholesalers in the reported costs.)

Maintenance of separate sales offices and salesmen by several competitors in the same limited market, offering substantially the same purpose coals from the same producing fields, is uneconomic in the opinion of the authors. Distribution on the basis of getting all the tonnage possible, over as wide a territory as possible, irrespective of cross-hauls, is uneconomic.

Sales campaigns, including advertising of all kinds, serve not to increase the total tons of coal consumed, but merely to increase the sales—often temporarily—of the advertiser. Consumption of coal is not increased beyond actual need by sales efforts—unless in the broad nature of education and market promotion for bituminous coal in competition with other fuels, such as has at times been an activity of the marketing agency, Appalachian Coals, Inc., and of the National Coal Association.

Such educational and promotional work for coal as a competing fuel can be at once more economical and more effective as a cooperative effort by marketing agencies and associations than by individual producing companies.

It seems reasonable to expect an increase in selling costs generally, under minimum price regulation. With price as a sales argument out of the picture, selling efforts can be expected to redouble in the direction of more advertising, more service such as technical advice, combustion engineering, etc.

It is evident that in order to administer the cost standard effectively the regulatory agency must determine, for different geographical divisions and for different coals and perhaps for sales to types of customers, the amount of reasonable selling costs, including distributors' discounts.⁴⁹

The acceptance by the Commission of the "actual cost of selling" as the best evidence of the reasonable selling cost has been criticized by the office of Consumers' Counsel, which in its 1938 annual report says:

The office has opposed that conclusion and will continue to oppose it. The office has submitted testimony to show that the "cost of selling" as reported by many producers exceeded the costs reported by and recommended by most efficient producers. Also the office has recommended to the Commission that distributors affiliated with producers shall be required to make a report in greater detail to the Commission so that if there is any hidden "profit" included in the "cost" it will be exposed. Further study will be necessary before a decision can be made as to how the problem can be attacked most successfully.

Opposing counsel at hearings have tried more than once to press toward a showing that sworn cost reports are not acceptable, but should have been audited back to the books and records. Books

⁴⁹ On June 20, 1940, the Coal Division, acting under its statutory authority, issued an order prescribing maximum discounts to distributors.

reflect the policy of the reporting company and generally will accurately reflect actual expenditures; that they necessarily reflect the actual proper costs for the purposes of this act is another question.

It cannot be denied that such possibilities exist, not only in the "selling commissions" paid, referred to above, but also in several other items. Among these would be depletion, depreciation, royalties, and salaries of officers.

To comply with the act depletion and depreciation must be reported as approved by the Bureau of Internal Revenue. Under rulings of this Bureau there are alternative methods allowed for taking each of these cost charges for income tax purposes. The complexities attached to a full discussion would require more space than is warranted here. At the risk of mis-statement in a simplified generalization, the possible alternatives are summarized in a general way below.

Depletion may be charged for income tax purposes either on the basis of—

- (1) 5 percent of gross income but not exceeding 50 percent of the net income.
- (2) tonnage produced; a per ton rate being agreed upon, based on valuation of the coal owned and/or lease-hold as of March 1, 1913, if acquired before that time, or cost if acquired since that time.

The purpose of choice (1) is to permit a company to take its income tax depletion in years of profit, making up for poor years at these times when the charge for depletion has the effect of reducing the tax. The only true cost of depletion in any one year would be the (2), the tonnage basis. In view of the long record of losses in this industry, it is understandable that many companies have made the choice of plan (1). The choice having been made and approved, the coal producers must continue, under the Bureau's rules, to report consistently in that way. More than one company maintains its depletion account for income tax purposes one way and uses for its own cost purposes the method of depleting actually mined tonnage at a rate based on value or cost. Since the only sound basis is the latter one, it follows that cost reports of such companies to the Coal Commission should be so based, irrespective of the income tax requirements, but they cannot be so reported under the act. It may well be that some companies using the 5 percent of gross income basis took more depletion in 1936 than proper costing would otherwise permit.⁵⁰ The depletion cost reported to the Internal Revenue Bureau and consequently to the Coal Commission for that year may be in excess of actual proper depletion in 1936, which is the basic year for cost determination. Some similar cases may have also occurred in the 1937 cost reports, on which were based largely the "adjustments" of the 1936 costs to cover changes since January 1, 1936. To the extent that such figures are in excess of the true cost of depletion on actual tons produced, an element in excess of the actual cost appears in the cost averages upon which prices rest. On the other hand, there may well be many companies which, under plan (1), took no depletion in one or both of these years. Hence, the depletion costs used in determining weighted average costs for price purposes are made inaccurate by the act itself, but the extent and the direction of the inaccuracy are not known.

⁵⁰ In 1936 the best year since 1930, the deficit of the bituminous coal industry was only \$6,524,000. Many producers operated at a profit.

Depreciation may also be somewhat out of line, since it may be taken on an estimated tonnage rate approved by the Bureau of Internal Revenue, although such tonnage rate rests on the value of the assets depreciated. A mine which for any reason suffers, in 1 year, a decided drop in output below its usual rate, would perhaps thus report a smaller depreciation than a strict costing, based on the estimated life of the assets being depreciated, would require. In a particularly heavy production year, the reverse might occur.

There is no criticism involved here of the rules for reporting for income tax purposes. It is rather a criticism of the Coal Act which requires the income tax basis to be used in arriving at costs for price fixing purposes. It is apparent that the result may be the inclusion of an element beyond actual cost in many cases, and in others perhaps an omission of some amounts that belong in cost. The degree of inaccuracy in the cost averages now being used is unknown.

Royalties as reported on cost forms and included in the averages are not in question, so far as their actual payment is concerned. However, the producing company or its controlling interest or family often owns, through a separate land-holding agency, the coal in which the producing company operates. Royalties in such cases represent a transfer from one pocket to another, a profit probably being involved in this payment to the land or coal owner. Some of these royalties may be on a fairly liberal basis, and in some instances were questioned by the Consumers' Counsel during its examination of individual cost reports as being apparently higher than the "going" rates of royalty in the locality. To the extent that this device represents a transfer from the producing company to the related land owner of a royalty beyond the locality's reasonable "going" rate, profits may be included by the producing company as an item of cost of production. Whether or not the aggregate of such profits is substantial in relation to the aggregate costs in any district is not as yet known.

Salaries of officers: Many producing companies are closely held. The officers of such companies may choose to withdraw some of the profits by way of salaries. This is a matter of business policy for which no criticism is offered. But when such salaries are reported as costs and enter into weighted averages upon which prices to consumers are based, the profit element in them defeats the purpose of the minimum price requirements. The Commission has not as yet declared a definite policy in this matter, though many instances of what seemed excessively high salaries were called to their attention by the Consumers' Counsel.

This reference to "hidden profits" carries no implication of deliberate padding of costs. It points rather to the necessity for a more precise determination by the administrative agency, and especially does it point to the necessity for a standard classification of accounts.

The complete elimination of profit elements or any inadmissible element included in the costs now being used might, as to any one of the items discussed, affect the weighted average costs to a very small degree only; such eliminations from all the accounts, wherever they may occur, might have a substantial influence. Whether or not this is so can only be determined after an estimate of the amount of such profit elements has been made.

A prime necessity is a standard classification of accounts. It is beyond dispute that if an accurate accounting record of the costs of production, selling, and administration is to be obtained from the operating mines of this country, it is not enough that they all report on a standard form on which various detailed items of cost appear, even though the items called for are well conceived and properly constitute all of the admissible expenses. There still remains the fact that there is a wide variation in accounting practice in the treatment of similar items, and in the general policies of the different companies with respect to capital charges.

The cost blank used by the Commission was developed through years of experience in which the producing companies conferred with agents of the Government and made recommendations. The producing companies are, it is true, well accustomed to the forms now in use, and have found it possible to recast their book accounts to the requirements of the forms.

The Division recognizes the need for a sufficient acquaintance with the cost systems and books of account in use in the industry to make possible the development of a standard system, or, preferably, a standard classification of accounts. Under such a standard classification, all companies would charge into their respective cost accounts the prescribed types of expenses. With this accomplished, all reports submitted to the Government on standard forms would be comparable. The doubt as to what kinds of items have appeared in the book accounts of companies reporting the different items on the cost form would be largely dispelled.

There would still remain an area of variance caused by the application of judgment and varying policies in drawing the line between "capital charges" and "expenses." This area would eventually be minimized through education. No clear standard for drawing the line between the capital charge and the expense item is now universal. The general accounting rule that the expenses which maintain the level of costs and rate of production are chargeable to current costs appears reasonable. There is, however, a realm of judgment capable of being influenced by expediency which led to considerable cross-examination in the final cost hearings.

An investigation⁵¹ was made on this subject by one of the authors, with the assistance of two accountants, occupying some weeks in the fall of 1938. A bank examination type of audit was made. Typical cost reports of a number of producers for early months of 1938 were checked back to their books and records. It is fair to say that the audit did not, in these cases, disclose careless inaccuracies in transcription from the books, deliberate inclusion of inadmissible items, or attempts to misrepresent. On the contrary, there was every evidence of sincere effort to fill out the report accurately according to instructions, and in the case of these examinations the reports did agree with the books in all substantial particulars. There were enough transpositions of items into the wrong cost form item; inadvertent inclusion of certain expenses, sometimes taxes or insurance on company houses or stores or other property, not properly chargeable to producing costs; and enough instances of other minor errors to point to the necessity for a definite standard classification of accounts. These field audits were welcomed by the producing companies as a constructive service.

⁵¹ Unpublished study by E. B. Gorde.

The cost-keeping officials of producing companies in some important producing fields have for years been meeting in an effort to develop standard practices for the benefit of all. A prerequisite to the determination of proper weighted average costs for this purpose is uniform classification of accounts.

Other Standards for the Initial Proposal of Minimum Prices:

Under the act, each district board is required "from time to time on its own motion or when directed by the Commission," to propose minimum prices free on board transportation facilities at the mines, classifying the coals by kinds, qualities and sizes, and showing price variations as to mines, consuming market areas, values as ^{to} uses, and seasonal demand. These prices shall—

- (1) yield a return per net ton for each district in a price area, equal as nearly as may be to the weighted average of the total costs as determined for such price area. This initial price proposal is understood to aim at a set of price variations that will reflect the relationships of the different coals and mines within each district, in such manner as—
- (2) to reflect as nearly as possible the relative market values;
- (3) to be just and equitable as between producers within the district;
- (4) to have due regard to the interests of the consuming public;
- (5) to be just and equitable as between producers within the district for any kind, quality, or size of coal for shipment to any consuming market area, and
- (6) shall not permit dumping.

The first standard, approximation of cost, has already been discussed.

To reflect relative market value of the various kinds, qualities and sizes of coal does not seem a particularly complicated requirement. In fact, however, it has presented problems of considerable difficulty. The term "relative market value" obviously implies the existence of markets, and hence the term refers to the relative value of coal in the market, rather than at the point of production. So long as the minimum prices established by the Commission are the market prices, the average "market value" of all kinds, grades, and sizes of coal (in a price area) is to be equal to the cost of production, as defined in the act.

"Relative market value," on the other hand, is concerned with differentials in price, rather than with price levels, and its relation to the cost of production is only indirect. The interpretation of the term revolves around the problem of proposing price differences that will properly and equitably reflect the relative market values of different kinds, grades, and sizes of coal. This does not mean necessarily that the differences which existed under unrestricted competition will reflect relative market value when prices are fixed. As between coals of the same size, but of different kinds and qualities, the average consumer probably enjoys greater freedom of selectivity than he does between coals of the same kind and quality, but of different sizes.

It might be contended that the relative value of two kinds or qualities of coal of the same size would be properly reflected if the difference in prices proposed between any two kinds or qualities measure the difference in the utilization value of the two coals under usual conditions.

It may also be contended that for the purpose of compliance with these requirements of the act, the relative values proposed between two kinds or qualities of coal need not constitute the measure of their relative consumer acceptance to any extent. It would follow, naturally, that relative market values of different kinds or qualities of coal of the same size would be the same for all consuming market areas served by the district.

In the extremely complicated picture presented by the multiplicity of mines classified in a considerable number of quality groups, and with a number of coal size groups, all seeking markets in many consuming areas, the task placed on the district boards of showing that the proposed prices reflect relative market values under any exact interpretation of the term would be tremendous. It has been contended that in consideration of the other standards in the act, the best evidence of compliance with the "relative market value" standard would be a showing of the actual market relationships in a recent past period, with an explanation of any substantial departure from those relationships.⁵² Such departure in some cases might be occasioned by a regard for the other standards imposed by the act, such as that proposed prices shall "be just and equitable as between producers * * * and shall have due regard to the interests of the consuming public." However, it was found impractical to rest any conclusions on the showing of past invoices and spot orders, analyses of both for middle western district, having been made by the statistical and research sections. It was apparent that such records were not reliable or sound as a basis of judgment or criticism of coordinated prices. Such records were available for only a few months' period. They reflected not a pattern of generally existing spreads between sizes and qualities, but instead they showed the absence of any pattern, the "bargaining power of particular consumers, the usual presence of certain sizes, practices which might probably be called dumping, attempts to raid territory by price cutting, and other factors and practices of the same sort."⁵³ The "relative market value" standard, in the present situation, rests very largely therefore on judgment and experience. Although the authorities may be guided to some extent by study of price relations in the recent past, it appears that they do not regard these price relations as a necessarily correct measure of quality relations.

The purpose of the prohibition of prices which permit dumping is obvious. Dumping ordinarily signifies prices (f. o. b. at the producing point) that are so much lower than the usual prices that one producer gains an advantage over others which has no relation to relative cost.

No general formula can be given. Low prices which in one market constitute dumping may, in another market taking the same freight rate, be entirely explained by interfuel competition. Under a marketing rule providing for appropriate procedure and approval by a district board, "distress" sales may be made at less than the established minimum prices. Each case must be examined individually and determined on its merits. Criteria to define dumping will not be easily and simply developed. The Coal Division has not, as yet, defined dumping.

⁵² Transcript of Hearings, General Docket 15, The Establishment of Minimum Prices, pp. 11682, 11692, 11,741, and elsewhere.

⁵³ Transcript of Hearing, General Docket 15, p. 9,035; Proposed Findings of Fact, Conclusions, and Recommendations of Trial Examiners (March 1940) pp. 35-39b, 831.

TECHNIQUE OF PROPOSING MINIMUM PRICES

The Commission, in its orders Nos. 245, 247, 249, and 251 (July and August 1938), set forth "Rules and Regulations for the Proposal of (Uncoordinated) Minimum Prices." Prices were to be proposed by district boards within 25 days, together with "all the data upon which they were computed, including, but without limitation, the factors considered in determining the price relationship." Each district board was directed to transmit its proposed price schedule to each code member in the district at least 15 days prior to its filing with the Commission. During the "interim" before filing with the Commission, such changes and corrections might be made as seemed proper to the board, based on receipt and investigation of any protests, by conference, hearings, etc. Any changes or corrections so made were to be transmitted to code members not later than the date of filing the proposed schedule of prices with the Commission. Copies of the schedule filed with the Commission were to be sent to each of the other district boards. The standards prescribed by the act were enumerated in the Commission's orders.⁶⁴

Classification of Coals.

The scheme of the schedule to be proposed was made uniform by these orders of the Commission. Each schedule must—

- (1) List each code member alphabetically.
- (2) Show opposite his name: (a) Name of the mine, (b) subdistrict in which mine is located, (c) seam or kind of coal produced, and (d) price classification (A, B, C, D, etc.) in each size group (represented by a number—1, 2, 3, 4, etc.) for all sizes applicable to such group that the mine is equipped to produce.
- (3) Show a table listing prices applicable to each classification.
- (4) Include a clause (of standard wording set forth in the order) to the effect that the prices in this schedule are not the final prices to be established, but are subject to such increases or decreases as may be necessary in coordinating to common consuming markets.

A sample of the schedule arrangement as called for by (1), (2), and (3) above is given in the orders, and copied below for illustration. In this schedule the letters represent qualities, A the highest, B the next, C third quality, etc. The actual prices that apply to these various letter designations are shown on the accompanying table, as required by the Commission's order.

Alphabetical list of code members showing price classifications by sizes for all uses except as separately shown

Company	Mine	Subdistrict	Seam	Size groups				
				1	2	3	4	5
Adams Coal Co.....	Black.....	Coal.....	No. 8.....	A	B	C	D	E
Jones Coal Co.....	White.....	Coke.....	No. 6.....	B	C	B	A	B
Smith Coal Co.....	Red.....	Iron.....	Sewickley.....	E	D	C	E	A
Williams Coal Co.....	Green.....	Glass.....	Pittsburgh.....	G	G	G	G	G

⁶⁴ See p. 275.

Prices applicable

Classification	Size groups				
	1	2	3	4	5
A	\$2.75	\$2.65	\$2.55	\$2.45	\$2.35
B	2.65	2.55	2.45	2.35	2.25
C	2.55	2.45	2.35	2.25	2.15

The proposal from district board No. 1 stated a general fact which lends substance to the reasonableness of these coal classifications generally, as submitted. It says:

Establishment of price classifications in district No. 1 has been an almost continuous process since late in September 1933, when what was then the eastern sub-district or what is now district No. 1 was called upon to propose price classifications and prices under the National Industrial Recovery Act * * *. At that time they had no analytical data, or records of shipments available, and had to be guided entirely by their judgment and knowledge of the markets and the various competitive coals. With the passage of the 1935 act, * * * district No. 1, in common with all other districts, began the assembling and consideration of data and information as to their coals which has been continued all the way through to the present time.⁵⁵

This basic classification of the coals has a fundamental importance, since it represents the opinion of the district board as to proper price relationships among all the kinds, qualities, and sizes of coal produced in their district, without considering differences in cost of transportation to different markets. It is impossible to treat fully the entire process through which the board's classification committee went, but, as a sample, the considerations used by the technical advisory committee of district board No. 1, as related in detail in the Commission's findings when it resubmitted the proposed prices to the boards for coordination, may be cited. Before these proposed prices had been submitted to the Commission, the last step of the district board had been to hear protests from various mines with respect to the classifications prepared for submittal. As a result of these protests, coals involved were reconsidered, some protests allowed and others denied. In fact, upon rechecking with more information in hand, 239 classifications among "wagon mines"⁵⁶ alone were revised.

In arriving at its classification of all the coals in the district, the technical advisory committee used its latest experience in classifying these same coals in the summer and fall of 1937. Its quality classifications were based on "logical seam classification," taking into account all factors on which accurate data were available and recognizing "that market experience must be relied on in the last instance to arrive at price variations as between coals that would be just and equitable to producers and have due regard for the interest of the consuming public." The committee carefully considered seam characteristics, including the effect of faults and disturbances; compared the coals classified in one area with coals in other areas and all the knowledge and experience available on the marketing and general reputation of the different coals; and took into account, in classifying the mine run size, the analyses of coals available in the files of the Commission's statistical bureau or those accompanying protests, as

⁵⁵ Federal Register (Jan. 19, 1939), p. 279.

⁵⁶ Mines without facilities for shipping coal by rail or water. Coal therefrom is shipped by truck or wagon.

well as some which the district board had obtained on individual mines. This technical advisory committee then submitted these proposed classifications to the district board's marketing committee, thoroughly discussed them, considered changes recommended by the marketing committee, and as a result made some revisions. In classifying, the mine run size of grade "E" coals, which represents the predominant tonnage, was priced at \$2.15, the tentative weighted average cost of the price area. A uniform spread of 5 cents per ton was applied for all size groups between each classification in ⁵⁷ above and below class "E." This spread between quality groups represents the difference in intrinsic value of the coals and the needs of the district in order to market its coals in its principal markets, namely, east of Pennsylvania and north of the Potomac River. The next step was to submit the proposed schedule to the district board, which, after thorough discussion, approved it and submitted it to the Commission.

There were variations in sequence of procedure, in the manner of weighing the different factors, and in degree of thoroughness, among the various districts. District 1 is cited merely as a sample. This brief description fails to suggest adequately the tremendous volume of detailed factual data, the complexities of market experience and use application involved in the preparation of these proposed price classifications. The work consumed weeks, in many cases months, and commanded in some districts considerable attention of experienced executives and technicians.

Under section 4-II (a) of the act, the district boards are to propose minimum prices and classification of coal and price variations as to (1) mines, (2) consuming market areas, (3) values as to uses, and (4) seasonal demand. The schedules proposed by the respective boards which classified coals, using letters as quality designations, did set up size groups, and applied to each mine the letters determined to represent their proper relative prices for each size group. They also proposed separate lists for certain "use" applications and for seasonal treatment of prices.

The size groups proposed were not uniform as to number or range of sizes in all districts. District 1, for instance, proposed five size groups, stating that—

the District Board believes that the five size groups it has proposed represent a step toward the simplification of its price list which is much needed; that they are all that are necessary; that by so limiting its size groups it will aid in eliminating requests for substitution of one size coal for another; and that said groups are fair and equitable as to both producers and consumers.

Other districts recommended different numbers of size groups to suit the conditions of production and demand.

The authors agree in principle with district board 1 that there is room for simplification in grouping of sizes. Undoubtedly the number of sizes and number of size groups may eventually be reduced in many districts without detracting from the value to the consumer or the combustibility in specific use. It also appears that there exists a general desire for a reduction in the number of sizes, when and as it can be accomplished with least inconvenience to consumers.

District 2 proposed 16 size groups, 3 of which represented prices for coal sold for "retort and water gas plants for the manufacture of illuminating gas," and the 16th of which was another use classification

⁵⁷ "Intrinsic value" as used here is taken to mean the chemical and physical characteristics of the coals.

rather than a size group—"coal for by-product plants." District 3 proposed 7 size groups, district 4 proposed 11, and district 8 proposed 31. These variations are given to illustrate the difference in the conditions as they have grown up and been recognized in the respective districts.

In the process of coordination these proposals were altered in some cases to meet situations encountered when different districts met in "common consuming markets."

Variations for Seasonal Demand.

Seasonal demand was recognized by providing, as in district 8, "seasonal discounts on domestic coal." In this district the coals used for domestic purposes to which seasonal prices apply fall in size groups 1 to 11, inclusive. To arrive at a base for seasonal discounts an estimate was made of the tonnage moving during April, May, June, July, and August, the months when seasonal discounts were proposed to be effective. The amount of the discount was applied to this tonnage and its effect upon the yield per ton ascertained; thus the board was able to arrive at a total yield approximating the weighted average cost. The average yield per ton during the discount period might fall below the weighted average cost level, but for the year the desired approximation would result. Discounts were provided as follows: On the first four size groups, 50 cents a ton in April with a discount 10 cents lower each succeeding month through August. On size groups 5 to 9, an initial discount of 25 cents with a reduction of 5 cents in each succeeding month through August; and on size groups 10 and 11, a discount of 10 cents until August, when a discount of 5 cents a ton was proposed. This particular district's schedule is presented merely as a sample. District board 7 also proposed seasonal prices. Other boards in price area No. 1 made no seasonal price proposals. The prices recommended by the examiners to Director Gray of the Coal Division grant seasonal discounts to districts 7 and 8 in all market areas other than market areas 1, 2, and 3.⁵⁸

Special Classifications by Use.

Use classifications were provided through the setting up of size groups in some instances (as in district 2 mentioned above, and in district 8). All districts provided a separate price schedule for railroad locomotive fuel, the price usually being the weighted average cost as determined. Districts producing coal applicable to by-product use (districts 2, 3, 7, and 8) proposed separate price schedules for by-product coal. Districts 1, 6, and 8 also proposed a separate price list for steamship bunker coal.

The reason for special use classifications differs in the case of railroad locomotive fuel, for instance, from that in the by-product class.

Railroads take their locomotive fuel from mines on their lines. Those roads which do not have mines on their lines buy from off-line producers, taking their locomotive fuel at the most convenient transfer point. Locomotive fuel cannot be said to have a market area or consuming market geographically, as in the case of steam coal delivered to a manufacturing plant. Therefore the scheme of the general price list, whereby mine prices are established for delivery to a certain market from certain mines, and another set of prices for delivery by the same mines to other market areas, cannot be practically applied to

⁵⁸ Proposed Findings of Facts, Conclusions, and Recommendations of Trial Examiners, pp. 342-345.

railroads. Their point of consumption is indeterminable. Under the necessity, then, of setting up a "field price" for locomotive fuel, it would seem that the figure to which the entire tonnage must conform in yield per ton is the logical basis—in other words, the weighted average cost figure. Besides, originating railroads stand in a peculiar relationship to the producing mines.

The "Findings" of the Commission for district 1 present this relationship and the reason for the proposed price schedule for locomotive fuel with great clarity,⁵⁹ and it is quoted here as being representative in its general statements:

The district board proposes on page 47 of its proposed schedule that all coals sold for use as railroad locomotive fuel shall take a minimum price of \$2.15 per net ton of 2,000 pounds, f. o. b. the mines, except when coal of size group No. 1 is specified for locomotive fuel, it shall take a price of \$2.25 per net ton of 2,000 pounds, f.o.b. the mines.

This proposal is said to be entirely in accord with past practices, both under fixed prices and under open competition, because it is a field price applicable to all mines and to all size groups of coal. The district board proposes the price on this basis, not as a concession to the railroads, but to meet the needs of the district by preserving to the producers therein this very important tonnage.

Railroads can use coals of varying sizes and qualities for railroad locomotive fuel. The district board proposed a quality spread of 35 cents between its highest and lowest quality coals, but if the same spread were made in the prices established for coal used for railroad locomotive fuel, the natural tendency would be for the railroads to buy their coal from the lowest price mines due to their ability to satisfactorily use said types of coals.

Due to the growth of the sizing of coal in district No. 1 and in all other districts, there are times when every producer finds himself with sizes of coal on hand that are not readily marketable, and if he is unable to dispose of such sizes, he is forced to shut down his mine, as a result of which he loses production and his employees lose work. The railroad locomotive fuel business is one of the outlets to which the producers look to take care of their odd sizes, and the railroads have always been willing to make their demands meet the necessity of the operators in this respect so far as it is possible for them to do so. Their willingness to do this is one of the factors that enables the operators to take care of their orders for other sizes and thereby keep their mines in operation and their men employed.

Bunker coal is sold at ports under its own peculiar conditions. The Commission's findings in the case of district 1 set forth the basis for a separate price schedule proposed for bunker coal:

In the sale of bunker coal it has always been the custom to mix coals of different grades, in order to give the operators of steamships the quality and size of coal that they desire. The proposal of district board No. 1 is the result of an agreement entered into by the bunker coal suppliers of the district as to a price set up which would suit their marketing needs and was adopted by the Board upon the recommendation of said bunker coal suppliers. In following the recommendations of the bunker coal suppliers in this respect, the district board pursued the same practice it did in proposing minimum prices under the 1935 act and under the 1937 act in December of 1937. The bunker coal suppliers of the district are of opinion that the size groupings and prices proposed for said coal will take care of their requirements and the necessity of the trade and give due consideration to their customer's interests. The proposals of the district board in this respect appear to be justified by the evidence and they are approved.

By-product coal represents a special use classification, with a price schedule of its own. The various considerations of quality preparations and size groupings are clearly described in the Commission's findings on the proposed prices for district 2,⁶⁰ quoted here:

For this use the size of the coal is no factor as such plants pulverize all coal before charging it into ovens, and slack, mine run, or double screened coals which are sufficiently alike in quality, are of equal value. Consumers prefer the smaller

⁵⁹ Ibid, pp. V-1-17.

⁶⁰ Ibid. pp. U-206-343.

size coal as it is more easily pulverized. For this use coals of different sizes which are substantially of the same quality, mine run, resultant mine run, nut and slack, and slack are grouped under size group 16.

By proper reference there were also included in this size groups coals produced at certain mines which are specially prepared and sized in order to make them acceptable for this use. While mine run and resultant coal from certain mines are not acceptable for this use, such mines can produce and ship other sizes of coals, such as double screened or lump coal, which are acceptable for by-product use and can move into the markets on the same basis as mine run and nut and slack from other mines. In still other cases nut and slack is not equal in value to the mine run and resultant mine run from the same mine, but is still acceptable at a price differential, which was established in the price schedule at page 48. For such by-product purposes the producers of District No. 2 principally ship nut and slack, mine run, and resultant mine run and the base price for this use, \$2.15, not only approximates the weighted average cost of Minimum Price Area No. 1, but is also approximately the average of the lowest price nut and slack and the highest price mine run which is generally acceptable for this application, that is, \$2 for nut and slack and \$2.35 for mine run gives an average of \$2.175.

The factors which enter into the evaluation of coals for retort and water-gas use are primarily as follows: and sulfur, the quantity of gas the coal will yield, and the structure of the coal. The sizes which are carried in separate size groupings for general commercial application are grouped for this use under size groups 13, 14, and 15 as described on page 5 of the price schedule as revised. The prices for by-product coke plants are in column 16, which means mine run, resultant mine run, nut and slack, and slack, unless otherwise indicated. The base price for retort and water-gas coal is the "A" price in size group 13 of \$2.40.

District boards 2 and 8 were the only ones to propose a special use classification for by-product plants, so far as price area 1 is concerned. Opposition to the principle was voiced by Alfred M. Ogle (Indiana Gas and Chemical Co.). Mr. Ogle contended that such special prices are discriminatory; that there is no reason to consider that such coals have greater value than they have had in the past; and that district 8 has not preserved old differentials between mine run and the resultant sizes, on the basis of which the business was developed.

Summary of Price Proceedings.

In summary then, proceedings began in July 1938 with Orders 245, 247, 249, and 251,⁶¹ which caused each district board to prepare a schedule of prices. These were submitted first to all code members in the district, their protests heard, some granted, and others denied, and the revised list was then submitted to the Commission. The Commission held informative hearings on these first proposed prices, and made "Findings of Fact" 6 months later.⁶²

It may be noted in passing that district boards 16, 17, and 18 proposed initial prices to market areas described in their schedules. The number of such market areas was respectively 30, 49, and 10. The Commission found that prices proposed did not take into consideration the differences in cost of transportation, and therefore accepted the market areas and prices, as modified, as a basis for coordination.

The price schedules, after modification and adjustment as noted in the Commission's findings, were returned to the respective district boards late in 1938 and early in 1939 with direction to coordinate them with competing districts in common consuming market areas.⁶³

These first price schedules, as they were modified and approved for coordination, were found by the Commission to comply with express standards and requirements of the act, including a yield per ton

⁶¹ July 30, August 11, and August 20, 1938.

⁶² December 1938, and January and February 1939.

⁶³ December 9, 1938, and January 16, February 20, and February 24, 1939.

approximating the weighted average cost of the minimum price area in each case, the figures being as follows:⁶⁴

Price area and district	Tentative findings of July-August 1938, weighted average cost of price area	Findings of January-February 1939, estimated yield per ton from prices before coordination	Price area and district	Tentative findings of July-August 1938, weighted average cost of price area	Findings of January-February 1939, estimated yield per ton from prices before coordination
Price area 1.....	2.157		Price area 2—Continued.		
District 1.....		2.1501	District 12.....		1.77
2.....		2.1515	Price area 3, District 13.....	2.474	2.5435
3.....		2.1653	Price area 4, District 14.....	3.617	3.6296
4.....		2.167	Price area 5, District 15.....	2.049	2.0615
5.....		2.1904	Price area 6.....	2.758	
6.....		2.137	District 16.....		2.761
7.....		2.1842	17.....		2.7644
8.....		2.145	18.....		2.75
13 (part).....		2.167	Price area 7.....	2.235	
Price area 2.....	1.772		District 19.....		2.225
District 9.....		1.7782	20.....		2.259
10.....		1.732	Price area 9, District 22.....	1.590	1.60
11.....		1.7387	Price area 10, District 23.....	3.2656	3.2499

COORDINATION OF PROPOSED PRICES IN COMMON CONSUMING MARKET AREAS

The Commission directed district boards for districts 1, 2, 3, 4, 5, 6, 7, and 8 (price area 1);⁶⁵ for districts 9, 10, 11, 12, and 13 (price areas 2 and 3);⁶⁶ and for districts 14, 15, 16, 17, 18, 19, 20, 22, and 23 (price areas 4, 5, 6, 7, 9, and 10)⁶⁷ to coordinate in common consuming market areas upon a fair competitive basis the minimum prices approved by the Commission for the respective districts to serve as a basis for coordination.

The standards provided for the coordination, are set forth in Chapter III of this study, pp. 275-276.

The district boards failed to accomplish such coordination (with the exception of the boards of districts 5, 14, 16, and 18) and the Commission proceeded to perform that function in lieu of the district boards.⁶⁸ By order of June 20, 1939, the Commission announced the schedules of coordinated prices for districts 1 to 8, inclusive, and set July 24, 1939, for final hearings at which a description of the common consuming market areas would be offered and evidence would be received to enable the establishment of minimum prices. All interested parties were to be afforded an opportunity to present evidence as to the conformity or non-conformity of the proposed coordinated minimum prices with the standards proposed by the act, and "such other evidence as would enable the Commission to establish minimum prices in conformity with the procedure and standards set forth in sections 4, II (a) and (b) of the Bituminous Coal Act of 1937." The

⁶⁴ Federal Register: for Price Area 1, (Jan. 11, 12, 19, 1939); for Price Area 2, (Feb. 8, 1939); for Price Area 3, (Jan. 12, 1939); for Price Areas 4 and 5, (Dec. 22, 1938); for Price Areas 6, 7, 9, 10, (Dec. 14, 1938).

⁶⁵ Orders No. 259, 261, and 266.

⁶⁶ Orders No. 264 and 266.

⁶⁷ Orders No. 263, 264, 265, 266, and 266.

⁶⁸ Order No. 267 (March 20, 1939).

proposals were to be subject to such modification as might be warranted by the evidence adduced at the hearing.

The record of all prior proceedings in this General Docket 15 was made a part of the record of this final hearing. At the same time the reports of producers on 1937 tonnage distribution to all destinations were made available (beginning June 26, 1939) to interested parties. These distribution reports formed the basis for estimating the average yield per ton to test its compliance with the cost standard prescribed, whereby the yield per ton must approximate the weighted average cost of the minimum price area.

Basic Considerations in Determination of Common Consuming Market Areas.

In 1939 the head of the Commission's Traffic Section was instructed, through the Director of the Marketing Division, to prepare a description of common consuming market areas for use by the Commission in coordinating minimum prices in these areas.⁶⁹ This Traffic Section had the benefit of consultations with the Commission's Legal, Marketing, and Statistics Sections as well as with representatives of district boards.

The market area is a subdivision of the entire country into a competitive area where several districts ship coal on a competitive basis.⁷⁰ Such areas are grouped on the basis of breaks in freight rates. In fact, all-rail freight rates were the most important factor in determining the boundaries of the areas. Also given consideration were the important influences of (1) truck competition, (2) competing fuels, and (3) tonnage distribution of coal to various markets.⁷¹ The areas are grouped in 4 general series.

(1) Market areas 1 to 99 represent that part of the country where the principal competition is between districts 1 to 12, 14, and 15.⁷²

(2) Market areas 98 and 99 embrace the receiving points on the Great Lakes and the St. Lawrence River.⁷³

(3) Market areas 100 to 157 apply to the southern part of the United States, where the principal competition is between districts 7, 8, 9, 13, 14, and 15.⁷²

(4) The entire country west of and including the States of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas has been assigned the "200" series of numbers because of the principal competition between districts 15 to 23, both inclusive.⁷²

The determination of market areas is a complex process. It can be summarized as follows: To illustrate the basic considerations upon which market areas rest, a brief recitation of the main considerations for the first few areas may be used. Market areas 1 to 4 are practically the same as under the Commission's first price establishment and as were used for price adjustments under the N. R. A.⁷⁴ Market area 1 is the eastern section of New England, including tide-water ports, and has as its western boundary the approximate limit of ex-tidewater shipments west. This boundary is also approxi-

⁶⁹ Transcript of Hearing, General Docket No. 15 (July 24, 1939, and thereafter), pp. 2101-2297. See map, appendix F hereof.

⁷⁰ *Ibid.*, p. 2185.

⁷¹ Proposed Findings of Facts, Conclusions, and Recommendations of Trial Examiners, p. 52.

⁷² Testimony of Charles H. Hayes, Chief of the Traffic Section, Bituminous Coal Division, in the Transcript of Hearing, General Docket 15 (July 24, 1939, and thereafter), p. 2113; Proposed Findings of Facts, Conclusions, and Recommendations of Trial Examiners, pp. 55-56.

⁷³ *Ibid.*, pp. 55-56.

⁷⁴ Transcript of Hearing, General Docket 15, p. 2109.

mately the limit of all-rail shipments northeast from districts 1, 2, 3, and 6.⁷⁵ Prices for market areas 1 and 2 are the same, hence the main purpose of this division is statistical.

Market area 2 (see map in appendix F) runs, roughly, west from the west boundary of area 1 to Rochester, N. Y., the line then running south, taking in a small corner of northeastern West Virginia and running eastward to the Chesapeake Bay. The boundary of this area was established entirely on a freight rate adjustment. The southern line of area 2 is drawn because the freight rates from the southern West Virginia and eastern Kentucky fields (districts 7 and 8) are lower than those applicable from the Pennsylvania and northern West Virginia fields. Therefore districts 7 and 8 control the freight rate adjustment to the territory south of that line.⁷⁶

Market area 3 is metropolitan Washington, D. C. Northern freight rates to this area are lower than southern rates, but the coals meet on a competitive basis.⁷⁶

Market area 4 also was established because of freight rate adjustments. Rates to this area are on a "net ton" (2,000 pounds) basis, whereas rates to areas 1 and 2 are on a "gross ton" (2,240 pounds) basis.⁷⁷

Railroads publish rates on a group basis in eastern territory. Generally rates from the Reynoldsville group and from the Clearfield group are the same for eastern movements. Other groups are related to the Clearfield group.⁷⁸ Origin group numbers which do not appear in any freight tariffs are used for Pocahontas and New River groups in districts 7 and 8, in order to indicate properly the various freight adjustments from the mines within each district.⁷⁹

For eastern origins, the producing mines were assigned to appropriately numbered mine origin groups. The "mine origin group" is the number assigned by the commission's traffic section to mines grouped together on the same freight basis in all directions. A "freight origin group" is the general group in which the railroads assign their mines for rate purposes. A "transportation group" is that combination of mine origin groups which go to a particular market area and take the same level of freight rates.⁸⁰ These groupings make for convenience in assigning price schedules to the same market area from different freight rate bases within the same district. For instance, for shipment into market area 4, the chief origin groups in district 2 are divided into the Pittsburgh rate group and the Connellsville rate group.⁸¹ The chief origin groups in district 2 take a 25-cent differential per gross ton over the Clearfield rate on shipments to market area 2.⁸¹

The so-called "home market" area is the "market area in which the mines of a particular district are located and where group freight rates to any great extent are not in effect."⁸²

The mines having the same group rate adjustment were placed in the same origin group. Mines with two railroad connections were given a different mine origin group number from other mines located

⁷⁵ Ibid., p. 2101.

⁷⁶ Ibid., p. 2106.

⁷⁷ Ibid., p. 2107.

⁷⁸ Ibid., pp. 2089-90.

⁷⁹ Ibid., p. 2092.

⁸⁰ Ibid., p. 2167.

⁸¹ Ibid., p. 2108.

⁸² Ibid., p. 2138.

in the same freight rate origin group which had only one railroad connection. These mines served by two roads were given an adjustment based on the lower rate. "The assignment of mine origin group numbers reflect the railroads on which the mines are located as well as the freight origin group in which they are located. This makes it possible for statistics and prices to reflect the proper adjustment as to railroad fuel coal; that is, the number assigned clearly indicates whether the coal originates on the purchasing railroad or on a connecting railroad."⁸³ Each district was assigned a separate set of origin group numbers. Within each district, using district 1 as an example, all mines in the Clearfield subdistrict were given the same series number, then the mines were regrouped according to the railroad serving each mine. Clearfield subdistrict had the series 40 to 64. Mines on the Cambria and Indiana Railroad in that subdistrict were given the origin group number 40, mines on the New York Central were given the origin group number 44, mines on the Pennsylvania Railroad the origin group number 45, etc.⁸⁴ In district 1 the Clearfield rate is the base for rates to market area 1.

Because coal originates at times on a connecting railroad, thereby involving the payment of transportation charges, prices for railroad locomotive use are established for on-line and off-line fuel.⁸⁵

The Chief of the Traffic Section of the Coal Division has testified that this system is workable and accurate, subject to experience in the immediate future.⁸⁶

In establishing the boundaries for a proposed "common consuming market area," the Commission's Traffic Section used the freight rate adjustments as bases and gave consideration to all the districts which have freight rates into the market area in question. No consideration was given to whether mines in the districts concerned actually have competing prices into that market area.⁸⁷

In some regions, certain areas were set aside from the main market areas because of severe competition from coal transported by truck; certain others were set apart because of the competition from natural gas and other forms of energy.⁸⁸ Specifically, in market areas 4 (southwestern New York), 5 (in the northwestern corner of Pennsylvania), 6 (the eastern Pennsylvania producing district No. 1, generally), and 8 (northern West Virginia), truck shipments were a consideration.⁸⁹ Competition with water shipments in certain territories is largely a matter of price and was not considered in establishing market areas.⁹⁰

The purpose of setting up these market areas was to furnish a basis for coordinating prices into common consuming markets. "No definite common formula could be used."⁹¹

The proposed coordinated prices then were arranged on schedules for each district, showing for each rail-shipping mine—

- (1) The mine index number.
- (2) The operating code member's name.
- (3) The mine name.

⁸³ *Ibid.*, p. 2097.

⁸⁴ *Ibid.*, p. 2093-2094, 2119.

⁸⁵ *Ibid.*, p. 2129.

⁸⁶ *Ibid.*, p. 2186.

⁸⁷ *Ibid.*, p. 2187-8.

⁸⁸ *Ibid.*, p. 2193.

⁸⁹ *Ibid.*, p. 2196.

⁹⁰ *Ibid.*, p. 2201.

- (4) The name of the seam in which the mine was operated.
- (5) The number of the "mine origin" or "freight origin" group.
- (6) The price index letter applying for each size group in which the particular mine has a classification.

Following this table of index letters appears the table of prices in cents per ton which each letter represented in each size group. Several such tables appear when necessary to provide a set of prices to some market areas different from those applying to other market areas or a set of prices from certain "origin groups" different from those of other "origin groups," and to provide for railroad locomotive fuel prices, tidewater vessel fuel prices, lake vessel fuel prices, etc. In some districts, a table of price adjustments for movements to specific destinations in the "home market" is provided to take care of freight rate absorption on short hauls. These adjustments are permissive, not compulsory. Price adjustments to offset freight rate differentials to various market areas are also provided.

A separate set of price tables appears to take care of "truck shipment only," the data shown being the same as above except that mine prices are the same to all market areas, and no "origin group" numbers are shown. The prices for coal shipped by truck were coordinated in a manner similar to that of coals shipped by rail and were then coordinated with prices of coal shipped by rail.⁹¹

Considerations and Procedure in Coordinating Prices.

In its coordination of prices for the several market areas, the Commission's work was in direct charge of C. J. Potter, the principal examiner and assistant chief of the Marketing Section. Testimony given in the final hearings by Dr. Potter and other witnesses for the Bituminous Coal Division discloses the technique of coordination.⁹²

Considered by Dr. Potter and his associates in the process of coordination were the following:

- (1) N. R. A. costs and market conditions.
- (2) N. R. A. minimum prices, their effect on the distribution of coals from producing districts, and the extent of their success, if any, in maintaining fair competitive opportunities in various market areas.
- (3) The Commission's 1937-38 prices.
- (4) Pertinent changes in costs of production and distribution, and in market conditions since the revocation of prices (February 25, 1938).
- (5) All distribution data introduced by F. G. Tryon.
- (6) Coordination agreements of districts 5, 14, 16, and 18, and partial agreements of all other districts.
- (7) Letters and reports from district boards stating their failure to achieve coordination.
- (8) Invoices for some market areas.
- (9) Comparative analyses (made at mines) of coals which were shipped into various market areas.
- (10) Comparable size and quality characteristics of each coal.
- (11) Freight rates.
- (12) Market history (excluding railroad and bunker fuel).

⁹¹ Proposed Finding of Facts, Conclusions, and Recommendations of Trial Examiners, p. T-1-322.

⁹² Transcript of Hearings in General Docket No. 15 (July 24, 1939, and thereafter) ad lib., but especially pp. 2329-2457; Proposed Findings of Facts, Conclusions, and Recommendations of Trial Examiners, pp. 43-44.

- (13) Seasonal demand.
- (14) Uses.
- (15) Competing fuels (in establishing market areas).

After the determination of consuming market areas, a break-down of tonnage distribution from each district to each area was made by size, quality, use, and transportation methods. In explaining the process of coordination, Dr. Potter said he selected a base coal for delivery into a typical destination in the consuming market area and determined the value of that coal in the market on a delivered basis, taking into account the various factors just enumerated. He related on a delivered price basis the various base coals of the other districts shipping into that area, and then related the various other coals of the same producing district to its base coal, deducting from those delivered prices the freight rate differentials applicable, or deducting the freight rates applicable to those individual coals, and thereby obtaining an f. o. b. mine price which reflected the coordinated value in either that particular destination or in that particular area.⁹³

The base coal to Philadelphia, a representative destination⁹⁴ in market area 2, was $\frac{3}{4}$ -inch slack ($\frac{3}{4}$ - by 0-inch). The "E" coals of district 1 were related to "B" coals of district 2 and to "D" coals of district 3. This size of coal from district 6 was related to that of district 2; that from district 7 with that of districts 1, 2, and 3; and the $\frac{3}{4}$ -inch slacks of district 8 with those of districts 1 and 3.

In summary, coordination of minimum prices involved the following steps:

- (1) Use of minimum prices approved by the Commission as the basis for coordination.
- (2) Determination of consuming market areas.
- (3) Consideration of the 15 factors enumerated previously.
- (4) Break-down of competing coals in each area by size, quality, use, seasonal demand, and transportation methods.
- (5) Selection of a base coal and the destination price thereon.
- (6) Coordination of various competing coals on a destination price basis, such coordination reflecting destination differentials.
- (7) Ascertainment of minimum prices f. o. b. mines, by subtracting the applicable freight rates from the destination prices, and checking estimated realization against the weighted average cost of the price area by multiplying such minimum prices by the tonnage distribution data.

In achieving coordination, departures were made from the original prices proposed by the district boards and approved by the Commission as the basis for coordination, such changes being necessary to give effect to all the standards of the act. It was testified that such standards had been complied with. Objections by the Division's legal counsel to questions as to interpretation and manner and extent of compliance with such standards were sustained by the presiding examiner, who held that the question whether or not the process of coordination, and the prices themselves, conformed to the standards of the act will be answered first by the examiners, then by the director, then by the Secretary of the Interior, and finally by the courts.

⁹³ Transcript of Hearing, General Docket No. 15, p. 2381.

⁹⁴ A representative destination is one that consumes practically all the sizes and qualities of coal shipped from various districts into the market area.

the possibility of a runaway coal market was apparently considered so remote that much less attention was devoted to these provisions, and, in some respects they are ambiguous.

Proposals for the establishment of maximum prices of coal are not new. As early as June 1917, it was proposed that the Federal Government should fix the prices of coal at the mines and at retail, or take the mines and operate them during the period of the war. Maximum prices were first mentioned in the Food and Fuel Control Act (Lever Act) and were subsequently established by the U. S. Fuel Administration.¹ The Lever Act² provided that such maximum prices should be based upon the cost of production, plus "a just and reasonable profit."

Bills proposed after the termination of the Fuel Administration contained proposals to fix the prices at which coal could be sold and also maximum prices, but not until 1928 were standards for the latter included. The Watson and Rathbone bills³ provided for a Bituminous Coal Commission which could fix maximum prices "with due regard to fair wages paid for the production of coal and a fair return upon the capital invested." Such prices could be changed from time to time, upon a hearing by the proposed Bituminous Coal Commission. From 1928 on, bills which contained proposals for maximum prices provided either for a fair return upon the capital invested or upon the property, or for cost plus a reasonable profit.

The first of the 1935 bills⁴ provided that no maximum prices should be established for any mine which did not return costs plus a reasonable profit, and this standard was retained in the Bituminous Coal Conservation Act of 1935.

The present Bituminous Coal Act of 1937⁵ provides that in the public interest the Commission may establish maximum prices for coal f. o. b. mines in any district to protect consumers against unreasonably high prices for coal:

Such maximum prices shall be established at a uniform increase above the minimum prices in effect within the district at the time, so that in the aggregate the maximum prices shall yield a reasonable return above the weighted average total cost of the district: *Provided*, That no maximum price shall be established for any mine which shall not yield a fair return on the fair value of the property.

A uniform increase in cents per ton over whatever minimum prices might be in effect would have little, if any, effect upon the coordinated relationships already established. A percentage increase would definitely affect price relationships and would also be more difficult to execute and use.

An important implication of this provision is that the Coal Commission (Coal Division) lacks authority to establish maximum prices in the absence of minimum prices previously established. If any emergency should so affect the United States as to necessitate the establishment of maximum prices for coal f. o. b. mines to protect consumers thereof against unreasonably high prices, could such prices be established when no minimum prices are in effect?

With respect to some mines it is quite possible that any price high enough to yield a fair return on the fair value of the property, assuming such fair value of the property is known, would be so high that the

¹ See ch. I, p. 246

² Sec. 26.

³ S. 4490 and H. R. 13880, respectively, May 18, 1928.

⁴ S. 1417 (Jan. 24) 1935.

⁵ Sec. 4, II (c).

coal would not sell. It is doubtful whether any maximum price that meets these standards of the act can be established on the coal from such a mine. Without knowledge of a fair value of each coal mine property, it will be difficult to ascertain whether a certain maximum price will yield a fair return upon that property. Ascertainment of a fair valuation of all coal mines is a matter of years, and any attempt to value them accurately in an emergency would be more of the nature of an expert guess. Although the act does not so provide, it is possible that maximum prices, with or without minimum prices, might be established in an emergency, and an opportunity then granted to each coal operator to make complaint that the maximum price upon his coal would not yield a fair return on a fair valuation of his property.

With the individual cost data which the Coal Division has for nearly every mine in the country, establishment of maximum prices on a cost-plus-a-reasonable-profit basis would certainly be a great deal more expedient and practicable, especially so if such prices are based upon the weighted average cost of each producing district. It is true that higher cost operators could make less profit than lower cost ones, but such has been the case under unregulated competition and under minimum prices. Aside from legal considerations, it is probable that establishment of maximum prices on the basis of a bulk line cost of production sufficient to permit the mining, without financial loss, of all coal demanded would prove quite feasible, as the experience of the United States Fuel Administration indicates.⁶

It may be that in some districts a uniform increase above minimum prices which will yield a fair return on the fair value of each mine property will yield in the aggregate an unreasonable return above the weighted average cost of the district.⁷ On the other hand, a uniform increase above minimum prices which will yield a fair return above the weighted average cost of the district may not yield a fair return on the fair value of the property. If this should prove true, the Coal Division might hold hearings on the granting of price exceptions in such cases. The establishment, by the method prescribed, of maximum prices which conform to both the cost standard and the fair value standard may prove extremely difficult.

The 1937 act also provides that the Commission (now Division) shall prescribe "due and reasonable maximum discounts or price allowances" which code members may grant to persons, whether or not code members, called "'distributors,' who purchase coal for resale and resell it in not less than carload lots." The Bituminous Coal Division must require such distributors in reselling such coal to comply with and observe the prices and marketing rules and regulations established under section 4 of the act. In effect this means that the Division can also fix maximum prices for such wholesale quantities as carload lots (about 50 tons). Perhaps as much as 85 percent of the total tonnage sold would be subject either to maximum prices at the mine or to maximum distributors' margins and thus to maximum prices.

There is no provision in the act for fixing maximum retail prices to protect the consumer who buys in small quantities against such retail prices as might result from an interrupted or an inadequate supply, of coal.

⁶ See ch. I, pp. 245-249.

⁷ Note that minimum prices are based upon the weighted average cost of the price area.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS—A PRELIMINARY VIEW

SUMMARY OF RECENT REGULATION

The previous chapter has discussed in considerable detail the Bituminous Coal Act of 1937 and the problems encountered by the Commission (now Division) in the calculation of costs and the working out of minimum prices. It has also indicated some of the delays and difficulties encountered and some of the differing views on a number of issues with which the Commission has been concerned. Before discussing some possible effects of price fixing according to the cost standard of the act of 1937, the principal events in the recent history of Federal price regulation in this industry will be summarized briefly.

The Bituminous Coal Conservation Act of 1935¹ was passed about 3 months after the invalidation of the National Industrial Recovery Act.² Even before the five commissioners had been sworn into office several bituminous coal operators had filed suits in Federal courts for injunctions against enforcement of the act. The bituminous coal code was promulgated in October 1935 under this act, and the work of organizing the district boards and setting up administrative machinery continued. During this time, however, the industry's attention was focused on the *Carter Coal* case then before the Supreme Court of the District of Columbia, testing the legality of the act.

The industry was divided over the feasibility of proceeding immediately to establish minimum prices, partly because of the uncertainty concerning the constitutionality of the act, and partly because the Commission had not ascertained the total of the weighted average costs of the respective price areas, upon which minimum prices were to be based. The classification of coals, the drafting of marketing rules and regulations, the collection of data on costs of production, and the proposal of minimum prices proceeded slowly. Weighted average costs for the price areas were announced between February and May 1936. Minimum prices were not established except for certain western districts. On May 18, 1936, the Supreme Court of the United States declared the act unconstitutional because the price provisions could not be separated from the wage and hour provisions which were held invalid. The major accomplishment under the 1935 act was the collection of data for individual mines on costs and realizations, and the formulation of a procedure for establishing minimum prices which proved useful in the administration of the 1937 act.

The Bituminous Coal Act of 1937 contains substantially the same provisions as the act of 1935, except for the wage and hour provisions, which were eliminated. The 1937 act strengthens the Commission's power to establish minimum and maximum prices.

¹ Public, No. 402, 74th Cong. (H. R. 9100); 49 Stat. 991 (Aug. 30, 1935).

² May 27, 1935.

After the promulgation of the code under this act on June 21, 1937, the organization of the district boards for cost and price determination followed rapidly. The Commission ordered the boards to propose standards of classification (June 1937), to submit proposed rules and marketing regulations (July), to file proposed initial classifications of coals (September), and to propose minimum prices (August and September 1937). In October the district boards were directed to determine the weighted average of total costs for the year 1936, adjusted for changes since January 1, 1937. Because of the failure of several boards to submit such proposed prices, the Commission took over the task, establishing minimum price schedules in November and December, effective December 16, 1937.

Several injunctions were granted against these minimum prices on the grounds that the Commission had held no public hearing at which interested parties could question and protest the price procedure followed by the Commission and the prices it announced. Because it was clearly unjust to make some producers observe the minimum prices in the face of competition from others in districts in which injunctions had been granted against the prices, the Commission revoked all minimum prices, effective February 25, 1938. Litigation during this period cleared up controversial points in the act, and the law was upheld on a number of points by the United States Supreme Court, on January 29, 1939, in the *Utah Fuel Co. case*.

At various times during 1938 the Commission held, after public hearings, that interstate commerce in bituminous coal in the coal-producing States (except North Carolina) came within the provisions of the act. District boards were ordered (April 1938) to determine the weighted average of total costs of the respective districts, such costs to be adjusted for any changes, other than seasonal, since January 1, 1936, and to propose minimum prices, based on the weighted average of the costs of the respective price areas, for the various kinds, qualities, and sizes of bituminous coal (August 1938). After the proposal of such prices the Commission directed the district boards to coordinate them, together with the previously proposed marketing rules and regulations (December 1938 and January 1939). Lengthy public hearings were held on both the weighted average of costs and upon the proposed coordinated minimum prices. Opportunity was afforded all interested parties to appear, to be heard, and to introduce evidence in support of or against the proposed coordinated minimum prices, in the final hearings which began in May 1939 and continued until January 20, 1940. During these hearings the Bituminous Coal Division of the Department of the Interior (Bituminous Coal Commission prior to July 1, 1939) went into great detail in showing the procedure followed in proposing minimum prices, determining consuming market areas, and coordinating the proposed prices. During the following spring the Coal Division announced minimum prices recommended by the trial examiners for establishment in the various price areas. Oral arguments on these prices were held and it was expected that the final findings of the Division would be issued and the minimum prices promulgated during July 1940.

Thus, after 3 years of operations under the act of 1937 minimum prices were not yet in effect. The history of the proceedings, however, illustrates the great complexity of price fixing on the basis of costs as defined by the act and the delays and difficulties involved. Since the revocation in February 1938 of its first prematurely established prices, the Commission and its successor, the Bituminous Coal Division, have applied themselves diligently to the tremendous task of collecting, tabulating, and interpreting data on costs, realization, prices, and distribution of coal necessary to determine prices. This includes data by various market areas and by sizes of coal, and requires classifying and pricing the many kinds, qualities, and sizes of coal and taking into account relative market values and values as to uses. The Commission and the Division have also been required to give attention to freight rates and to competing fuels. Although not specifically required by the act to do so, the Division has afforded opportunity to all interested parties to present their case with respect to costs, realizations, and marketing rules and regulations, distributors' discounts, and proposed prices. The assembled data in connection with the operations of the bituminous coal industry during the past 4 years are the most complete and most reliable ever collected.

EFFECTS OF THE APPLICATION OF THE COST STANDARD

Since prices have not yet been established under the act of 1937, there is, of course, no evidence of the actual effects upon the industry of minimum prices established according to this standard. Since the act expires on April 26, 1941, experience with prices established under it will necessarily be short before the question of extension of the act arises. The following discussion of some possible effects of the application of the cost standard is presented, in order to emphasize some of the features of the act which are not clear and which are important for any discussion of public regulation of prices.

For purposes of analysis it has been assumed that the Bituminous Coal Division will provide adequate enforcement machinery, and that producers and consumers generally will accept the prices about to be established. In our opinion, the proposed schedule of prices will be given a fair chance, although the problem of enforcement is clearly a difficult one. If prices are to be successfully established under this or any other act, they must have a large measure of voluntary compliance from the industry, and general acceptance by the consuming public. It is difficult to believe that an industry with over 6,000 mines and 4,000 mining companies, serving practically the entire country with the source of nearly half of all its heat, light, and power supply, used by millions of separate consumers, large and small, and requiring a price schedule of several hundred thousand prices, can be regulated by a police organization and strict observance be compelled on an enforcement basis. Rather, compliance must be sought from the producing, distributing, and consuming elements.

The minimum prices recommended by the examiners are higher for some, but not all, areas than recent market prices and, for the country as a whole, are about 11 cents higher than the national average of un-

regulated prices in 1937, although it is estimated that they are still slightly below cost.³ Unless demand increases greatly, these minimum prices will tend to become market prices, and to put a floor under the market. On this basis, the following tentative judgment of some of the possible results may be made.

1. Profits should be realized by the producing industry as a whole even after capital charges. This is based on the apparently reasonable expectation of an annual production approximating or exceeding that of the basic year 1936 (439,000,000 tons) and of the 1937 period used for adjusting costs (445,000,000 tons were produced in 1937). This expectation of profits rests largely on our belief that the mine costs reported to the Commission and used by the Bituminous Coal Division as the measure of average price realization contain profit elements or "extra-cost" elements which, in a strict sense, should not appear in costs intended to be used as a standard for minimum prices. The amount of these profit elements is unknown, but it might average more per ton than the missing cost element of discounts which was allowed wholesalers but which could not be reported because many companies entered sales to wholesalers on their books as net sales.

2. Prices will be subject to opposing influences: (a) Barring the possible offset of general wage increases or other increases in major costs, continued mechanization and improved efficiency in mining over a period of time will reduce waste and have a tendency to reduce costs. This influence has already been notably at work in recent years; its momentum should receive a new impulse as producers struggle for cost reductions to increase earnings. A direct result will be a greater concentration of production in mines of larger capacity and output, a movement also under way for several years. A natural result of further mechanization will, of course, be an increase in the output per man per day and a spread in the growing multiple-shift operation of mechanized mines to cut the unit cost of investment overhead. It is our belief that the incentive to reduce producing costs will be stronger under the minimum price regulation of this act than under free competition. The incentive under free competition was to minimize losses as far as possible while meeting destructive price competition; there was little chance for profit. Under price regulation, the incentive will be to increase the margin of individual mine realization above individual mine cost. It would seem that once this margin is established, it should last longer than it would under open competition. Under the act of 1937 the minimum prices are to be reduced only after a showing of a reduction of weighted average cost in a price area. Under open competition prices can be reduced by the action of relatively few firms.

³ Department of the Interior, Information Service, Press Release No. P. N. 9809 (April 16, 1940). Although no direct average price comparisons are given because of the difficulty of averaging various areas and markets, it is indicated that the recommended minimum prices "would give the industry an estimated minimum national average return of \$2.072 per ton." The expected average sales realization of \$2.072 is 1.6 cents a ton below the average cost of \$2.088. The statement further indicates "this income figure is approximately 11 cents a ton higher than the average income under unregulated prices in 1937—the last period for which figures are available."

In the Rocky Mountain area, however, it is stated that recommended minimum prices are at about the same level as present prices. On March 25, 1940, the Bituminous Coal Division of the Department of the Interior issued a press release on this subject in which they stated (with regard to the level of prices announced on that day for the Rocky Mountain areas): "The first schedules released by Bituminous Coal Division trial examiners contain recommended minimum prices which generally approximate the same level of prices at which the bituminous coal affected was sold during the past year. Although the examiners' recommendations for prices in these districts generally approximate the previous levels, there are instances in which the recommended prices on particular coals do not coincide with prices prevailing during the past year because of peculiar circumstances."

(b) Selling costs will have a tendency to increase. With minimum prices in effect, price as a sales argument will strike a barrier, and various forms of nonprice competition will become more prevalent. Competitive efforts will not cease; they are likely to take the direction of more advertising, publicity, technical and combustion engineering service—individually and collectively. Concentration of sales effort may be stimulated, and instead of, perhaps, 75 percent of the commercial sales going through selling agents and wholesale distributors, there may be a sharp rise to 85 or 90 percent. A trend toward a separation of the two functions may be looked for—but accompanied by producer-distributor affiliation of the same interests in separate functional organizations. Since the act provides no authority to regulate directly the commissions paid by producing companies to their sales agents, the Coal Division may follow the lead of the former Commission and require the filing of all sales-agency contracts, and also require that commissions must be reasonable for the service performed. This, however, will not prevent the percentage commissions generally in effect and recognized as the going rates from increasing the amount (in cents per ton) paid in commissions if the establishment of minimum prices by the Commission should set a higher level of prices than that prevailing in the past several years. Nor has the Division yet made any open move to exclude from costs the profits to affiliated sales companies from commissions paid them, in which the producing interests share (though the producing company itself, it is true, may not receive any of the profit). Unless some way is found to segregate these profit elements in commissions and to establish a definitely recognized line of reasonableness for sales agents' commissions, the effect will be to increase selling costs of producers.

We look for the aggregate upward influences, including the general upward trend of prices and wages, to outweigh the downward ones, during the year or two immediately ahead.

3. High-cost producing mines whose operating conditions or managerial ability preclude drastic downward adjustments in cost, and whose coal is not of a quality to command compensatory price classification, will be severely handicapped and may be forced to retire or close, pending better price levels. The ability to cut wages as a means of cutting prices is no longer practicable. On the other hand, some recently idle mines, if favorably located, may renew operations. It is impossible to predict to what extent this may occur.

4. Shifts of demand will probably occur. The extent to which consumers may shift from one size of coal to another, from one mine to another, and perhaps from one field or district to another, will be largely influenced by the extent to which price relations are altered. The extent of such shifts and their significance to any one district or to the maintenance of present tonnage ratios is unpredictable at present.

5. Employment: Wage scales and the collective bargaining system will be protected. The act is, of course, minimum wage legislation as well as minimum price regulation. With stimulated mechanization and increased output per man per day, the average number of men employed will have a tendency to decrease, unless or until a permanent increase in demand brings about higher production levels. We anticipate future demands for higher wages. Their influence on costs, and on minimum prices, is commanding.

6. Thus, in our opinion, the consumer faces an initial level of prices equal to or higher, on an f. o. b. mine basis, than that prevailing for several years past, and, in our judgment, a continuing upward trend. This is his contribution to a more balanced economy in the bituminous coal industry in order that producers may cover their average costs. The question is: Will price regulation under this act, as it stands or as it might be amended, bring sufficient improvement in the general economics of the industry so that it will be worth the apparent cost to the consumer? We believe that, with some changes, the act may do so, if it can be so administered as to maintain a reasonably stable price level and to avoid labor disputes and other stoppages in supply.

Protection of the consumer against so-called panic prices, or sky-rocketing in emergencies, or a general wartime price boom is attempted by the act's provisions for fixing maximum prices. As now worded these provisions, including the requirement of a fair return on the fair value of the property, will be difficult to apply. In order to make maximum price fixing effective, it would probably be necessary to amend the law. Even though the provisions of the act are ambiguous, it is possible, of course, that there would be general willingness to accept, in a grave emergency, controls by the Division—which, in other times, might be fought on technicalities.

DEFICIENCIES IN THE PRESENT ACT

In the light of these probable immediate consequences of the setting of minimum prices let us examine some of the apparent deficiencies in the price-fixing provisions of the act, as it now stands, before proceeding to a consideration of the broader problems of regulating the bituminous coal industry in the interests of the workers, the producers, and the consumers.

Some difficulties are to be expected in initiating any program such as this. The establishment of a national price schedule is a tremendous task, involving lengthy, cumbersome procedure. The Federal Government has never before attempted the establishment of prices for an industry such as bituminous coal on a national basis in times of peace, although it has, of course, had long experience with railroad rates, which are exceedingly complex. Bituminous coal prices are sensitive to day-to-day changes, economic and political, national and international. There are, moreover, certain standards and procedures imposed by the act which seem to work contrary to its purposes in some circumstances.

There are major inconsistencies inherent in the wording of the act which make it difficult, if not almost impossible, to expect uncontested acceptance.

The most serious defect in the act—one which may affect the industry adversely in times of slump and the consumer adversely in times of definite increases in production levels—is the unresponsive lag between changes in market conditions and the adjustment of prices to meet them, which seems to be imposed by the cumbersome procedural provisions of the act. This lag is only partly offset by the power of the Commission to increase or decrease minimum prices whenever a district board furnishes satisfactory proof of a change in excess of 2 cents per net ton in the weighted average of the total costs in the minimum price area, exclusive of seasonal changes. In a case of in-

creased demand and higher production levels, as previously pointed out, this lag might cost the consumer several millions of dollars before new cost levels could be determined and a lower price schedule established. In the opposite case of increased cost due to a definite slump in consumption and production, no adequate means seem available, under the act, for the industry to cut prices promptly to hold business. In fact, any change in price would probably have to follow costs upward, thus intensifying the slump in demand and production.

The current year's prices, under the act, generally must rest on last year's costs—except in the case of emergency maximum prices. To illustrate, let us assume that weighted average costs have been determined and that prices will be established to yield a return of approximately the average cost. Assume that production, responsive to demand, falls off 25 percent this year as compared with last year (which the average costs theoretically represent, although they are actually weighted on the 1936 production). Volume of output—the most important factor immediately affecting costs—is then at work. A drop in number of days worked by the mines from, let us say, 18 a month to 14 a month would mean a substantial increase in production cost per ton—unquestionably more than 2 cents.⁴

The act⁵ requires the Commission to increase or decrease the established prices "accordingly," upon satisfactory proof made at any time by any district board that a change in excess of 2 cents per ton has occurred in the weighted average cost of a price area, exclusive of seasonal changes.

This hypothetical case does not involve a seasonal change; it might, for example, extend over several seasons of recession. The question now is: Should the district boards produce the proof of an increase in cost exceeding 2 cents, thus forcing an increased level of prices at a time when the demand should be stimulated? Such increases in price will discourage sales of coal, while opening the door to incursions of unregulated, competing fuels. Under ordinary circumstances, sound business policy would dictate reduced prices to encourage all possible sales and hold the consumers for the coal industry. This example, although hypothetical, is well within the limits of practical possibilities which may face the regulatory body sooner or later.

If, however, another increase in demand were anticipated shortly, the industry might well take advantage of this provision and force an increase in prices, on the basis of the increase in cost during the slack period. This would work to the advantage of producers when the upswing brought increased working time and reduced costs.

⁴ See F. E. Berquist and Associates, *Economic Survey of the Bituminous Coal Industry Under Free Competition and Code Regulation* (National Recovery Administration, March 1936). On p. 245 (vol. II), there is a projection of costs, showing the effect of changes in number of days worked. This is hypothetical because it merely reduces to a 1-day cost the actual reported costs for 19 days worked in January 1935, by the group of 113 mines which reported from the eastern subdivision of division I (now district 1 of minimum price area 1); and then projects the various items to the basis of 8, 10, 12, 14, 16, 18, 20, and 21 days of work. Assuming that all factors affecting cost remain the same in any two periods, an actual comparison would be better—but no two periods ever are alike in every cost factor. The hypothetical basis may be taken as fairly indicative. It shows that this group of mines worked 19 days in January 1935, with an average total producing cost per ton of \$1.8462. Had they worked an average of only 16 days, the projected cost would have risen to \$1.9613, an increase of 11½ cents per ton. These figures may not be applied to any other group of mines nor to any other month of operation. They are quoted here as the best available indication of the heavy influence of working days on average cost per ton.

It is safe to assume that if a sustained reduction of days worked per month were to persist over a period of several months so as to overcome the influence of seasonal fluctuation alone, and if the days worked averaged 4 days monthly lower than in the comparable past period, this time factor alone (all other cost factors remaining the same) would affect costs in probably every coal act district by much more than 2 cents per ton.

⁵ Sec. 4-II (A).

Such a situation does not give promise of attaining the act's objective of "promoting interstate commerce in bituminous coal" or "to promote the use of coal and its derivatives." Rather, this provision for revising prices to follow costs laggingly could operate to accentuate decreases in sales volume in depression, for example, and emphasize the industry's troubles by trying to force its prices to swim against the current of general business trends.

There are other circumstances in which the provisions of the act may defeat its purpose during the period immediately following the establishment of prices. The first prices to be established in 1940 will be related to the costs of 1936 as adjusted to the actual costs of 1937, and with regard to certain known tax and other changes effective since then. By the time minimum prices have been established the working time of the mines, governed by the volume of orders then available, may be quite different from that of 1936-37 and costs may be affected thereby. The year 1938 saw production 22 percent below that of 1937. For the first 10 months of 1939, production was running about 13 percent ahead of 1938 but still considerably behind the 1937 and 1936 rate. The Bituminous Coal Division multiplied the proposed prices by the tonnage distribution figures of 1937 to test the approximation of the expected realization against the weighted average costs in each price area. Now, should there be a much larger demand than in 1939, due to greatly increased industrial consumption, sufficient to cause a rate of production similar to that of 1936 (439,000,000 tons) or 1937 (445,000,000 tons), the working time of the mines might be sufficiently like those years to cause the prices to return an average per ton approximating the weighted average costs as determined by the Commission's "Finding of Fact." Should the rate of production, however, exceed that of 1936 or 1937, it is probable that several months would pass before a sufficient proof of an established reduction in cost amounting to 2 cents per ton or more could be made.⁶ Before the necessary procedure could be completed, consumers might well have paid for their coal an excess of several million dollars, even on a "minimum price" basis, over and above the amount obviously intended by the act to yield a return per ton approximating these weighted average costs.⁷ This hypothetical situation might occur in any other period. This lag involves no violation of the act, but the act's cumbersome procedure obviously is not suited to the industry's extreme sensitivity to demand.

If the demand should increase so far as to bring about a strong seller's market, it might require that maximum prices be established as provided in section 4-II (c). This section provides that maximum prices must be established at a uniform increase above the minimum prices effective at the time, and recognizes that in such circumstances the maximum price "shall yield a reasonable return above the weighted average cost of the district." No maximum price can be established for any mine which will not yield a fair return on the fair value of the property. Thus the Bituminous Coal Division would be required to determine what a "fair return" is, as well as the "fair value of the property," both long and difficult procedures. It is likely that any

⁶ As of March 1940, coal production was still running below the level of March 1937.

⁷ Under present conditions of over-capacity and intense competition, minimum prices will become the actual prices at which coal is sold. On the other hand, it is quite possible that cooperation between marketing agencies, a marked increase in demand, severe weather, or some other factor which would interrupt the distribution of coal, would force the actual prices above the established minima. The provision for maximum prices recognizes this possibility.

maximum price schedule put into effect would, except under a grave emergency situation, be subject to protests from individual mines on the ground that the prices would not yield a fair return on the fair value of the property. It must also be remembered, however, that, unless the seller's market bids fair to extend over a considerable period of time, it would be poor business for the extremely high cost mines to secure by protest a series of exceptions entitling them to even higher prices than the standard maxima, the results of such exceptions being discriminatory prices against consumers who may find themselves under the necessity of looking to these mines for their supply, and the consequent cessation of buying from mines by these consumers as soon as the seller's market disappears. As a practical matter it is probable that many mines entitled to exceptional maximum prices would feel it disadvantageous to apply for them. There apparently would be a basis of legal action and injunction against certain maximum prices on the ground of noncompliance with this particular "fair return on the fair value" provision. Section 4-II (c) is carelessly drawn, and, to be effective, requires amendment. The requirement that maximum prices be accomplished by a uniform increase of minimum prices appears to be contradictory, in practice, to the "fair return on the fair value" standard. The possibility of a "cost plus" basis alone would be a more workable arrangement.

In summary, it appears desirable that any price control provisions should empower the administrative agency to change the effective minimum prices with less cumbersome procedure, and enable a more prompt, practical response to definite general changes in market demand. Further, it appears that the agency should be entrusted with authority to act upon its judgment without the necessity for going through such a long, time-consuming legal procedure. The authority might take the form of a declaration of belief and provision that the minimum price schedule might be changed tentatively, subject to the full proper procedure and final findings.

With this discussion of some of the possible effects of the fixing of minimum prices for bituminous coal—anticipations which cannot be verified until minimum prices have actually been effective for some time—we turn to some of the broader problems of Federal regulation of bituminous coal. Consideration is given to various possible methods of handling the coal industry—free competition, marketing agencies established by the industry, interstate compacts, complete public ownership and control, and some variant of Federal regulation of prices and production. Following the discussion of these alternatives, the authors' conclusions and recommendations are presented.

ALTERNATIVE METHODS OF BITUMINOUS COAL REGULATION

Special public interest attaches to natural resource industries. There should, in the public interest, be provision for a reasonable degree of controlled development; a minimum of avoidable waste in production; decent and dependable conditions of employment and earnings for labor; stable financial status and opportunity for reasonable profits from operation; a fair competitive opportunity among producers and with other fuels; an economical distribution system; and a stable price structure which can command consumer support.

Free Competition.

Under the system of free competition which has generally prevailed in the bituminous coal industry the situation has been far from satisfactory. The number of commercial mines in operation has varied from year to year, but capacity still considerably exceeds production. Production has varied widely as a result of fluctuating demand, suspension of work, and other causes. The supply of coal to the consumer has been frequently interrupted with disastrous results, and it has been because of these interruptions that the Federal Government in the past has intervened. The price of coal to consumers has at times been too high and at other times too low, using cost of production as a standard. A fair return upon the investment has often not been obtained, and in every year since 1928 the industry has suffered a total net loss of millions of dollars. The number of men employed and the number of days worked have declined since 1923. Such stability as has been obtained in wages has been due to unionization. The workers' income from wages, however, has been relatively small because of the limited number of days the mines have operated. In short, free competition has failed to protect the consumer of coal from widely fluctuating prices, sometimes unreasonably high, and from interruptions in supply; it has failed to equate capacity with demand and production and to yield costs plus a reasonable profit; it has failed to provide employment for many of those dependent upon the coal industry; and at various times it has given those employed not much more than a subsistence income.

Consumers have been able to do little to remedy these conditions. Labor has pressed unionization. Cooperation of producers for control of prices and output was prohibited by the antitrust laws.

In the face of this history of the bituminous coal industry, it is difficult to avoid the conclusion that the industry itself has failed to accomplish any reasonable approach to a balanced economy. This is not intended to condemn the entire industry. Groups in the industry have tried earnestly to find practical machinery to promote reasonable market stability, but they have often been stalemated by other more shortsighted groups and by the very nature of the industry itself. As already indicated, the existence of several thousand companies, each concerned with its own individual property and its financial situation, has made it difficult, if not impossible, for any individual producer or group of producers to establish effective leadership. Organized efforts of the various field associations of producers have been ineffectual, by and large. Chain-mine operations have not proven more successful, in the main, than single-mine operations. Prior to the decision in the *Appalachian Coals, Inc., case*, cooperative action was thought to be prohibited by the antitrust acts. A marketing agency, as indicated elsewhere in this report, is weak unless supported by Government regulations and enforced membership.

It appears that the very structure of the industry, particularly the large number of operating companies and the greatly over-expanded productive capacity, makes it practically impossible for the industry to accomplish anything effective with respect to conservation, stability of wages and prices, capacity and production control, elimination of waste, and adequate supplies to consumers at reasonable prices. For these reasons it is our opinion that Government assistance in some form is essential. The present legislation has substantial merits, but

it is not wholly satisfactory owing to some inconsistencies and to its lengthy procedural requirements.

Marketing Agencies.

As already indicated, cooperative action from within the industry has not been particularly successful. Among the leading efforts in this direction have been certain marketing agencies.

An attempt was made to afford coal producers some relief from the restrictive effects of the antitrust acts by the bill, H. R. 8523.⁸ This bill provided that individual operators might cooperate in mining and marketing bituminous coal in interstate and foreign commerce. Such trade associations and marketing agencies were to be exempt from the provisions of the antitrust acts.

This bill, as well as several others introduced between the period between 1928 and June 16, 1933, was not passed. The proposals may have had some influence, however, in encouraging the formation, in the fall of 1932, of the Appalachian Coals, Inc., the best known of the several marketing agencies now existing. The "marketing agency" idea was hailed by many as the industry's salvation. This type of agency has had no reasonable opportunity to demonstrate its effectiveness, since immediately following the Supreme Court decision of March 13, 1933, in which the court held that the plan of Appalachian Coals, Inc., did not violate the antitrust acts, the National Recovery Administration imposed a code program. Following the National Recovery Administration period came the first coal act of 1935.

The Supreme Court's decision held that the Government had failed to show adequate grounds for an injunction against Appalachian Coals, Inc., but recognized—

That the case has been tried in advance of the operation of defendants' plan, and that it has been necessary to test that plan with reference to purposes and anticipated consequences without the advantage of the demonstrations of experience. If in actual operation it should prove to be an undue restraint upon interstate commerce, if it should appear that the plan is used to the impairment of fair competitive opportunities, the decision upon the present record should not preclude the Government from seeking the remedy which would be suited to such a state of facts.

In reversing the adverse decision of the lower court, the Supreme Court instructed the District Court to—

Enter a decree dismissing the bill of complaint without prejudice and with the provision that the court shall retain jurisdiction of the case and may set aside the decree and take further proceedings if future developments justify that course in the appropriate enforcement of the Anti-Trust Act.

There are now in existence several similar marketing agencies.

The decision in the recent *Madison Oil* case suggests that a marketing agency with the purpose and effect of price fixing would be illegal unless exempted from the antitrust laws by special legislative measure, such as the provision concerning marketing agencies in the act of 1937.

There are now in existence several similar marketing agencies. Many factors in the industry still see this collective marketing plan

⁸ January 5, 1928.

as the "American" way to restore balance to the industry. Let us look at the main provisions of the operating plan of Appalachian Coals, Inc.¹⁰

Appalachian Coals, Inc., was an exclusive selling agency of 137 producers of bituminous coal in the "Southern High Volatile Field," now known as district 8 under the coal act.¹¹ These producers mined about 12 percent of the total production east of the Mississippi River, and about 54 percent of the total production in their own fields (now district 8). Eliminating the output of "captive" mines (producing chiefly for the consumption of the owners), these 137 producers accounted for about 74 percent of the output of their district and immediate vicinity. The member producers owned all the capital stock of Appalachian Coals, Inc., holdings being proportioned to the members' production. One thousand shares of common stock were authorized, with a par value of \$1 per share; 9,000 shares of preferred stock were authorized, the par value of which was \$100 each. Dividends at 7 percent were cumulative. Only the common stock carried voting power, and a majority was held by 17 of the members, who were defendants in the court action. In uniform contracts, to be separately made, each member constituted Appalachian Coals, Inc., an exclusive agent for the sale of all coal (with certain exceptions) produced by the member in the stated field. The Appalachian Coals, Inc., agreed to establish standard classifications, to sell all the coal of its principals at the best prices obtainable, and, if all could not be sold, to apportion orders upon a stated basis. Prices were to be fixed by the officers of Appalachian Coals, Inc., at its central office, but on contracts for future deliveries beyond 60 days the producer's consent had to be obtained. This marketing agency was to receive a commission of 10 percent of the gross selling prices f. o. b. mines, and guarantee accounts.¹² To preserve existing sales outlets, producer members were to designate, according to an agreed form of contract, subagents who were to sell on terms and prices established by Appalachian Coals, Inc., which allowed commissions of 8 percent by the subagents.

It was contended that a violation of the Sherman Act was involved in that the plan would eliminate competition among the members and effect a substantial control of prices in many markets. The lower court found that "this elimination of competition and concerted action will affect market conditions, and have a tendency to stabilize prices and to raise prices to a higher level than would prevail under conditions of free competition," adding, however, that the selling agency would "not have monopoly control of any market nor the power to fix monopoly prices." The defendants in the case insisted that—

the primary purpose of the formation of the selling agency was—

To increase the sale, and thus the production, of Appalachian coal through—

- (1) Better methods of distribution
- (2) Intensive advertising and research

To achieve economies in marketing; and

To eliminate abnormal, deceptive, and destructive trade practices.

¹⁰ See the decision of Supreme Court in *Appalachian Coals, Inc., et al. v. United States* (288 U. S. 344 (March 13, 1933)).

¹¹ See the transcript of the hearing on the Application of Appalachian Coals, Inc., for Provisional Approval as a Marketing Agency, Docket No. 3-FD, National Bituminous Coal Commission (Washington, D. C., July 26, 1937).

¹² By July 1937 the fee paid to Appalachian Coals, Inc., had been reduced to ½ cent a ton.

Whether the announced purposes of the Appalachian Coals, Inc., would have been realized under operation, or might have been exceeded, with the result of further court action, as provided in the Supreme Court's decision, cannot be known.

In the light of past history, the question can be raised whether the operation of Appalachian Coals, Inc., and other large marketing agencies (of which several have been organized but have not had a decisive practical test) would actually have succeeded, in the absence of the Bituminous Coal Commission, in doing more than substitute for the destructive cut-throat prices and practices of individual producers an interagency struggle of the same nature. One weakness of the Appalachian Coals, Inc., and the other similar agencies as an effective solution for the economic problems of the coal industry lies in the fact that substantial tonnages remain outside their membership. These owners are free, if they choose to do so, to offset with destructive practices the stabilizing influence of the agencies. Of course, had the Appalachian Coals, Inc., membership represented nearly 100 percent or even nearly 90 percent of the Appalachian production, the Supreme Court decision might have been adverse.

These agencies have, however, been recognized as potential influences for stability. The 1937 act empowers the Commission to exempt a marketing agency from the antitrust laws, provided the Commission finds that the agency's operating agreement (1) will not unreasonably restrict the supply of coal in interstate commerce, (2) will not prevent the public from receiving coal at fair and reasonable prices, (3) will not operate against the public interest, and (4) that the agency and its members have agreed to observe the established minimum and maximum prices, marketing rules, and other regulations established by the Commission. Upon such approval, the act says a marketing agency may as to its members, or marketing agencies may, between and among themselves, provide for the co-operative marketing of their coal at prices not below the minimum or above the maximum prices prescribed by the Commission under the act.¹³ Obviously, under and during such approval by the Commission, two or more marketing agencies might be able to agree on a level of prices somewhat above the minima without necessarily violating the code, or the act, or the objectives thereof.

Marketing agencies whose operating plans and agreements have received approval of the Commission are—

- Alabama Coals, Inc. (District 13).
- Appalachian Coals, Inc. (District 8).
- Arkansas-Oklahoma Smokeless Coals, Inc. (District 14).
- Belleville Fuels, Inc. (District 10).
- Brazil Block Fuels, Inc. (District 11).
- Fairmont Coals, Inc. (District 3).
- Kentucky Coal Agency, Inc. (District 9).
- Middle States Fuels, Inc. (District 11).
- Smokeless Coal Corporation (District 7).
- Southern Illinois Coals, Inc. (District 10).
- Southwest Coal Co. (District 15).
- Upper Buchanan Smokeless Coals (District 8).
- Western Pennsylvania Coal Corporation (District 2).

Additional marketing agencies are in process of organization.

¹³ Sec. 12.

It is held by some, as already indicated, that marketing agencies offer the solution to the problem of the coal industry. There remains, however, the problem of whether or not a marketing agency could enforce its rules upon nonmember producers and could agree with other marketing agencies upon prices at which their respective coals should sell in common consuming market areas. Could they attain more success than certain district boards, whose failure to coordinate prices necessitated coordination by the Bituminous Coal Commission in 1937 and again in 1939? Even if they could do this there remains the question of enforcement of their orders and supervision of their prices and practices to protect the consuming public. It seems beyond doubt that some Federal agency would be necessary to supervise the actions of these agencies and to approve or disapprove the prices they would establish. As this would necessitate the collection of detailed data on costs of production, distribution, realization, sizes, and classification, it is probable that the establishment of prices for the benefit of the industry, labor, and consumers could be accomplished better in this way by the Federal agency itself. Such is the present arrangement under the Bituminous Coal Act of 1937.

*Interstate Compacts.*¹⁴

Most of the coal-producing States have commendable statutes providing for inspection of mines and safety measures, but no one State can adequately restrict capacity or production and establish prices for its coals without some protection from unrestricted competition from other coals moving in interstate commerce. The inability of the individual State to solve its own coal problem is indicated in the briefs filed by several States as *amicus curiae* in the *Carter Coal case*. Because of this interstate competitive situation, the joint action of several States by interstate compacts has been suggested as a way out of the coal dilemma.

Interstate compacts have been used for various purposes.¹⁵ Although they have been specifically proposed for the bituminous coal industry,¹⁶ none has been ratified to date. The interstate compact holds some promise as a regulatory device but the obstacles to getting the major coal-producing States to agree upon its provisions, ratify it, and then coordinate either production quotas or minimum prices, or both, seem almost insurmountable. Furthermore, the enforcement of the provisions of such a compact between the contracting States would rest upon the Federal Government. It seems logical that the Federal agency which would enforce the provisions of an interstate compact should have an important role in the determinations of the provisions to be enforced.

Public ownership or control.

Although legislative interest in Government ownership and operation of the bituminous coal industry was manifested as early as 1894,¹⁷ there has been no such control exercised. Its nearest approach came during the World War when the United States Fuel Administration

¹⁴ Interstate compacts are authorized by the Constitution of the United States, Article I, Section 10, Clause 3: "No State shall, without the consent of Congress, . . . enter into any agreement or compact with another State, or with a foreign power."

¹⁵ See "The Subject Matter of the Compacts Heretofore Undertaken," Oil Conservation Through Interstate Agreement (Government Printing Office, Washington, D. C., 1933), pp. 174-206; "The Interstate Oil Compact," Energy Resources and National Policy (Government Printing Office, Washington, D. C., 1939), pp. 397-401.

¹⁶ H. R. 10980 (March 30, 1932); H. J. Res. 596 (May 25, 1936); H. J. Res. 5 (January 5, 1937).

¹⁷ S. Res., 53d Cong., 2d sess. (May 31, 1894).

assigned production quotas and established marketing zones in which certain coals had to be sold and in which others were prohibited. The Fuel Administration established maximum prices f. o. b. mines and also limited jobbers' and retailers' margins, thus in effect controlling the bituminous coal industry at all stages without ownership.

Proposals for Government ownership and operation of the coal mines have usually been made during periods of temporary emergency and have come from all sources, including the United Mine Workers of America.¹⁸ Some bills have provided that the President, and others that the Interstate Commerce Commission, should take over and operate the mines. A recent bill, H. R. 3121,¹⁹ provides for the creation of a "National Natural Resources Corporation" which would buy and operate coal mines, oil wells, water power plants, natural gas fields, plants for the manufacture or distribution of the products thereof, and plants for the manufacture of equipment and appliances needed for the use thereof, to meet the domestic needs and supply farm markets. The bill provides that within 18 months after its passage no private person or corporation can engage in the production or sale of any of these four natural resources. This bill has not been passed.²⁰

It is possible that a Government-owned corporation similar to some of the war-time agencies²¹ and some of the existing Federal organizations created since 1933 might assure a more continuous supply of coal and afford a higher income to coal miners, with a smaller financial loss than has prevailed in the coal industry under private ownership, but in view of the pressure which might be exerted upon such a corporation by consumers, employees, and taxpayers, it remains a moot question whether or not such a corporation would reduce capacity, assure adequate supplies at reasonable prices, pay a living income to miners, and operate efficiently at or near costs. Government ownership and operation would be further complicated by competition from other fuels unless they were controlled by the same agency. Such a task may be beyond the present ability of the Government.

Other Types of Control.

A council of perfection would involve a plan with the objective not only of producing coals from the most economical operations, but also coordinating their prices to various markets in such a manner as to minimize the costly cross-hauls which typify our distribution system as it has grown, not only for bituminous coal, but for practically all of our widely distributed products. Such a plan would also contemplate an intelligent balance between capacity, output, and demand; proper provision for wages and hours of labor; and, with consideration for economic efficiency in the whole economy as well as regard for human values, a reasonable policy of rehabilitation of coal mining labor which has become or may become unemployable in the coal industry. Attainment of these objectives in very high degree would require absolute control by one or more agencies of the number and location of operating mines; of capacity and investment; of total production and of allocation of output and markets; of prices; of certain types of costs such as salaries, selling expenses, and the like;

¹⁸ How to Run Coal (the "District No. 2" plan), United Mine Workers of America (September 20, 1919).
¹⁹ January 24, 1939.

²⁰ With respect to regulatory plans not mentioned herein see L. E. Young's "Proposals for Stabilization of the Bituminous Coal Industry," Proceedings of the Third International Conference on Bituminous Coal (Carnegie Institute of Technology, Pittsburgh, Pa., 1931), Vol. I, pp. 53-81.

²¹ See H. A. Van Dorn, Government-owned Corporations (Alfred A. Knopf, New York, 1928).

and of rehabilitation and retraining of labor. Wages and hours of labor might be left to the Fair Labor Standards Act and the process of collective bargaining with Government supervision.

There seem to be four types of control, which may be regarded as alternatives, that are in some degree practicable as methods of achieving much better conditions in the bituminous coal industry: (1) Complete Government ownership and operation, (2) extensive and strict Government control, or Government operation, with private ownership, (3) self-regulation by the industry under Government supervision, and (4) regulation that stops far enough short of complete Government control so that substantial elements of free enterprise and private initiative remain.

Complete attainment of the ends set forth above through the control devices listed would necessitate either nationalization of this industry or Government control quite as extensive and rigorous as that involved in nationalization. In the latter case, although private ownership was not abolished, little, if any, freedom of enterprise could remain. Such thorough control by Government, with or without Government ownership, would be attended by serious political, administrative, constitutional, and economic difficulties, some of which were noted in the preceding section. It is to be viewed as a last resort, to be adopted only if schemes of less extensive and less drastic control, such as that sketched below, should prove to be utterly inadequate.

Another type of control, involving the least Government participation of the four alternatives here discussed, is self-government by the industry under supervision of public authorities. This might take the form of control through voluntary or compulsory marketing agencies. We consider that the operation of marketing agencies, without production control or Government price fixing, offers respectively (1) merely a substitution of bitter competition among large producing fields in place of competition among individual producers, or, with interagency agreements, a substitution of giant sectional competition, leading toward monopolistic practices; and (2) no essential improvement over or difference from the present administrative organization scheme under the Coal Act of 1937. Although marketing agencies have had no opportunity to prove their ability to attain industrial stability and thus contribute to general stability, we are unable to see a definite assurance that the destructive and wasteful competitive history of the industry would be halted and reversed by these means alone. The establishment of one huge marketing agency for the whole country, with membership compulsory to all producers, would obviously require extensive Government regulation, rather than mere supervision, if consumer interests and minority producer interests were to be effectively protected.

RECOMMENDATIONS ON FEDERAL REGULATION OF PRICES AND PRODUCTION

There remains the alternative of regulation that is at once strong enough and effective enough to accomplish desirable results and limited sufficiently so that substantial scope remains for free enterprise and private initiative. This means regulation similar to that now provided by the Bituminous Coal Act of 1937 with some modifications and with some additional controls.

Let us examine the possibilities of this moderate form of regulation with a view to arriving at a general description, first, of its objectives, and secondly, of the main provisions to accomplish these goals.

We believe that the aim of the industry and of government, with the sympathy of the public, is—

- To establish stability of prices and markets;
- To eliminate waste in production and conserve our coal resources, for our own benefit and that of the future;
- To diminish waste in distribution by minimizing the crosshauls and other uneconomic distribution costs as far as possible without dangerous disruption;
- To reduce and minimize waste in consumption by applying, so far as practical, the most appropriate coals to the different uses;
- To overcome waste of human resources, through recognition and protection of wage scales commensurate with standards of respectable living; and
- To do all these things and at the same time to preserve as much free enterprise as possible, as well as a degree of participation by the industry in the scheme of regulation.

It is our opinion that the least objectionable scheme is one which puts in a floor for prices, below which coal cannot be sold, as a protection against a seemingly inherent weakness of destructive price-cutting. This plan is in the interest of a strong industrial structure without which coal will be out of balance with the general economy. At the same time such a scheme should provide for the emergency establishment of maximum prices to protect the consumers.

Fears have been expressed that the public has no protection, under such a plan against excessive wage scales which under favorable conditions might conceivably be forced through perfectly legal negotiations. These authors can hardly picture labor forcing unreasonable wage levels upon an industry whose prices would shoot upward, when as a result the industry upon which they depend for their livelihood would be faced with probable losses of tonnage and employment because more consumers would be driven to lower-priced competing fuels. The present act is undoubtedly a kind of minimum wage legislation, but it does not have specific standards for wage determination. In view of the fact that labor costs generally are about 60 to 65 percent of total costs, regulatory legislation for the industry might impose some restrictions concerning the extent of movement of labor costs either up or down. In view of the present exceedingly difficult situation in the industry, it is impossible to conclude definitely that price regulation, either in its present form or in any similar form, will be permanently effective and successful from the start.

In its present form the act of 1937 is implemented with hopelessly lengthy procedural requirements and contains inconsistencies tending to defeat its objectives, yet in our opinion it has some great merits. With certain modifications and additions this scheme of regulation should be satisfactory. The following tentative outline for regulation which embodies the best compromises consistent with the desired ends, is basically patterned after the main provisions of this act.

- (1) Create a small and impartial commission, with no representation for labor or operators. A commission of three should be more efficient than a larger commission.

- (2) Give the commission a voice in freight-rate regulation applied to bituminous coal.
- (3) Set up a simple production control plan, vesting wide latitude in the commission (because of the tendency of a producer to increase his unit production when he finds that regulation is increasing his unit return). Require every new mine to obtain a certificate of convenience and necessity before development; thereafter to operate under production control.
- (4) Provide for the prompt adoption of a standard classification of cost accounts.
- (5) Provide a system of minimum price regulation. Some consideration might be given to the soundness of basing minimum prices on out-of-pocket costs of production, eliminating charges for depreciation and depletion with their existing wide differences in basis and method of computing.²² Provide also for fixing of maximum prices when deemed necessary to protect consumers, with a proviso of a sort that does not emasculate the process of price fixing to preserve the legal and constitutional rights of operators.
- (6) Provide, under commission supervision, compulsory marketing organizations of producers, either by districts or by producing fields. Their purpose would be to act as giant sales agencies and thus to minimize general duplication of selling effort and selling expense. Their setup and functioning would be under stricter regulation than contemplated in the present act.
- (7) Regulate fees and charges of all selling companies (directly connected with point 6).
- (8) Empower the commission to issue temporary orders, pending proceedings, for general increases or decreases in existing minimum prices, so that prices may be more responsive to market requirements.
- (9) Put a definite limitation upon unduly high wage rates. In its most practical form, this might involve an arrangement under which wage rates would fluctuate with sales realization in a manner similar to that prevailing in the copper- and silver-mining industries.²³
- (10) Establish an impartial body to handle the problem of unemployment, particularly rehabilitation or reallocation and resettlement of mine labor permanently unemployable in the industry, so that such labor may retain its value to the general economy.
- (11) Authorize the administrative body to conduct research to develop new uses for coal, and further economies and greater efficiencies in its utilization, and to encourage a general coordination of all governmental, industrial, and institutional research agencies.
- (12) Provide for collateral regulation of oil and natural gas.

²² Under open competition, cut-throat prices often ignored even "out-of-pocket" costs, and led to the abrogation of wage agreements and a gradual degradation of labor.

²³ See "Development of Collective Bargaining in Metal Mining," *Monthly Labor Review* (U. S. Bureau of Labor Statistics, September 1938), vol. 47, No. 3, pp. 594-595.

If regulation were to embrace the authority to allocate production among the mines, under any allocation which provided an annual tonnage sufficient for, say, the 1937 demand of 445,000,000 tons, some mines would be deprived of their opportunity to operate at their most economical or most profitable rate. Quite likely some mines would be seriously injured if the allocation were to be based on the least wasteful production, and not on a mere mathematical recognition of each mine's recent production. Reduction of waste in the interest of conservation, and in the interest of the present consuming public, requires the exercise of something more than a mere mathematical formula. It was with this thought, and the belief that the necessary authority should be provided, that a production-control plan vesting wide latitude for judgment in the commission, has been suggested under point 3.

Excess capacity, responsible for so many of the ills of the industry, would not necessarily be eliminated by a system of production control combined with price regulation, but its destructive influence would be largely removed.

The question will be raised: "Why control both production and prices?" The answer, in our opinion, is that production control alone will not preclude destructive price cutting in this industry by mines which at some seasons are faced with the necessity of disposing of their excess tonnage of certain sizes produced unavoidably while orders for other sizes were being prepared. In filling orders for certain sizes, a mine must produce a heavy percentage of, say, slack, for which there may be little or no market at the time. It has the choice of finding a market for slack under a drastic price inducement, or closing down when this excess of slack accumulates in coal cars and blocks loading and side tracks. The result is to break the market on the "long" sizes—both as to the mine's own producing district and as to competing districts. At another season, when the market for slack is active, the prices will substantially stiffen, causing a wide seasonal fluctuation. A degree of instability and consumer dissatisfaction results.

The control of minimum prices with reasonable regard for seasonal variations is, in our opinion, absolutely necessary to year-round stability and protection for the existing minimum wage agreements.

The authorities acting under the present act establish minimum prices to yield a return per ton approximating a past average cost adjusted for changes so as to represent present cost. Theoretically, this appears sound. Practically, the lengthy procedure required drags through an intermediate period after the "closing date" for cost adjustment. This intermediate period, in the present instance, saw a change in production and demand—with its direct effect on costs. Presumably, the authorities can avoid the problem of predicting how much coal will be demanded at the prices finally established—or how much would be demanded at higher or at lower prices.

Let us consider production control alone. The problems cited above could not be avoided by authorities charged with production control so as to bring about the same result (an average price realization approximately equal to average costs). In order to set the output at an approximate point to effect this result, they would have to predict to a reasonable degree the volume of production and sales which would

bring prices that would average an amount equal to cost. Presumably, they would not be able to predict it exactly. Hence the results would be different under either price control or output control unsupported by the other. Nevertheless, increasing experience with the problem would reasonably be expected to provide authorities with knowledge sufficient to minimize the differences.

The pattern of prices, volume, sales, profits, etc.—as between kinds, qualities, and sizes; as between districts; and as between companies—might be quite different under production control alone from that which would result from price control alone.

In depressed periods, production would respond more promptly, in fact automatically, to the decreased demand if there were established minimum prices which remained unchanged. (Under the present act, any lawful change would of course occur upward, due to the upward effect on cost resulting from lowered output, and the change could be made only after a considerable lag to allow for hearings and showing of established increases in cost exceeding 2 cents per ton.) With output control alone it would be very difficult to predict the degree of restriction of production necessary to hold prices at a desired level during a depression. On the upswing, unless the permissible output were expanded with or before an increase in demand, prices would probably increase.

With production control unsupported by price control, and assuming demand to be unpredictable within limits necessary to control the price movement effectively, producers might, and probably would, cut prices lower than really necessary to sell their full quota. For the same reason, wages might be in danger of reduction. Especially would prices or wages, or both, be in line for cutting, perhaps to an unnecessary degree, if demand decreased considerably and output quotas were not immediately reduced and to the right degree.

Minimum price control encourages increased expenditures on selling. Perhaps production control would not provide this stimulus and total profits might be larger under production control alone in periods of good demand. Control of output by the assignment of production quotas would probably not affect the distribution of sales volume in the same way as would minimum price regulation alone. Production control would probably be less easy to evade than minimum price control.

It is probable that at any given time demand conditions may be such that the volume of coal produced and sold would be approximately the same whatever the price level (i. e., average realization) within a restricted range of several cents per ton. Clearly such a range could not be very wide because of competing fuels. Within such a range of prices in which the demand and production remain the same regardless of price, production control alone could not prevent the cutting of prices to the bottom of this range. It is, of course, true that the fixing of minimum prices at the top of this range would result in the same tonnage consumption as would the fixing of output at the point appropriate for prices anywhere within this restricted range.

We believe it desirable to protect wage agreements, and hence producer costs, under all probable conditions of market fluctuation, and that only a combination of production control and minimum price regulation can provide firm protection in all conditions.

Only a few questions concerning excess capacity can be touched on here. There is the question of how to accomplish stable industrial conditions as long as excess capacity continues, and the corollary of this question: How to refuse such excess capacity the opportunity to operate, without compensating the owner. Under regulation, many marginal operators would find their production definitely limited at a point not only below their capacity but below their normal production. Should a system of subsidies, one which would benefit the general economy and contribute to a balance between capacity and demand without penalizing either producers or consumers, be considered as a means of avoiding the perpetuation of financial weakness of the coal companies and a poor economic condition of the mine workers in this industry? Or would Government purchase of marginal mines for a coal reserve better accomplish both this purpose and that of conservation of coal resources?

Thus, in summary, it is our belief that some form of Federal regulation of both prices and production of bituminous coal and of competing fuels is necessary and that the Bituminous Coal Act of 1937 is in a sense a half-way measure, providing unduly cumbersome procedures for cost determination and price fixing and allowing too little latitude to the controlling agency. We believe the act (which expires in April 1941) is in need of amendment. Further, it is clear that the economic standards prescribed by the act, designed to aid labor and producers, may set certain limitations to the effective competition of coal with other fuels if prices, tied to costs, are too inflexible or rise in periods of depression. Moreover, the degree to which consumers' interests are protected by minimum prices is open to some question when demand is slack. The provisions of this act for fixing maximum prices are almost unworkable.

There is no clear way to satisfy these conflicting interests, but it is plain that Federal price fixing is an exceedingly complex and difficult procedure, which, in itself, by no means provides a solution to the many problems of the depressed bituminous coal industry. If price fixing is to contribute to the satisfactory solution of these problems it must be made more flexible, and it needs to be supplemented by other measures including output control, and perhaps control to force retirement of capacity as well as control of new capacity, and provisions for the rehabilitation of labor.

APPENDIX A

Capacity and production of bituminous coal ¹

[Short tons of 2,000 pounds]

Year	Commercial mines in operation ²	Calculated capacity 308 days	Production	Percent			Production per man per day
				Capacity operated	Total output cut by ma- chines	Under- ground tonnage mechan- ically loaded	
1900		279,000,000	212,316,000	75.99	24.9		2.98
1901		309,000,000	225,828,000	73.14	25.6		2.94
1902		348,000,000	260,217,000	74.71	26.8		3.06
1903		387,000,000	282,749,000	73.13	27.6		3.02
1904		425,000,000	278,660,000	65.65	28.2		3.15
1905	5,060	460,000,000	315,063,000	68.48	32.8		3.24
1906		496,000,000	342,875,000	69.15	34.7		3.36
1907		520,000,000	394,759,000	75.96	35.1		3.29
1908		531,000,000	332,574,000	62.71	37.0		3.34
1909	5,775	560,000,000	379,744,000	67.86	37.5		
1910	5,818	592,000,000	417,111,000	70.44	41.7		3.46
1911	5,887	593,000,000	405,907,000	68.47	43.9		3.50
1912	5,747	622,000,000	450,105,000	72.35	46.8		3.68
1913	5,776	635,000,000	478,455,000	75.28	50.7		3.61
1914	5,592	668,000,000	422,704,000	63.32	51.7		3.71
1915	5,502	672,000,000	442,624,000	65.92	55.0		3.91
1916	5,726	673,000,000	502,520,000	74.74	56.5		3.90
1917	6,939	699,000,000	551,791,000	78.97	55.5		3.77
1918	8,319	717,000,000	579,386,000	80.75	55.9		3.78
1919	8,994	736,000,000	465,860,000	63.32	59.2		3.84
1920	8,921	796,000,000	568,667,000	71.48	59.8		4.00
1921	8,038	860,000,000	415,922,000	48.37	65.6		4.20
1922	9,299	916,000,000	422,268,000	46.07	63.2		4.28
1923	9,331	970,000,000	564,565,000	58.25	66.9		4.47
1924	7,586	871,000,000	483,687,000	55.57	69.5		4.56
1925	7,144	822,000,000	520,053,000	63.26	70.6	1.2	4.52
1926	7,177	821,000,000	573,367,000	69.79	71.7	1.8	4.50
1927	7,011	835,000,000	517,763,000	62.04	72.2	3.3	4.55
1928	6,450	760,000,000	500,745,000	65.92	73.8	4.5	4.73
1929	6,057	752,000,000	534,989,000	71.14	75.4	7.4	4.85
1930	5,891	770,000,000	467,526,000	60.78	77.5	10.5	5.06
1931	5,642	736,000,000	382,089,000	51.90	79.1	13.1	5.30
1932	5,427	653,000,000	309,710,000	47.47	78.8	12.3	5.22
1933	5,555	615,000,000	338,631,000	54.31	80.0	12.0	4.78
1934	6,258	622,000,000	359,368,000	57.72	79.2	12.2	4.40
1935	6,315	640,000,000	372,373,000	58.13	78.9	13.5	4.50
1936	6,875	680,000,000	439,088,000	64.56	79.3	16.3	4.62
1937	6,548	710,000,000	445,531,000	62.82	(³)	20.2	4.69
1938	5,777	663,000,000	348,545,000	52.57	79.9	(³)	4.89

¹ (U. S. Geological Survey) Mineral Resources of the United States and (U. S. Bureau of Mines) and Mineral Yearbooks.

² Excludes mines producing less than 1,000 tons per year.

³ Not available.

APPENDIX B

Fuel economy and energy supplied by competing source of fuel and power, 1909-38¹

[Short tons of 2,000 pounds]

Year	Consumption of bituminous coal, United States (calculated)	Electric power plants (pounds per kilowatt-hour)	Railroads		Percent of total energy derived from—					
			Pounds per 1,000 gross ton freight car miles	Pounds per passenger car miles	Bituminous coal	Pennsylvania anthracite	Total coal	Petroleum	Natural gas	Water power at prevailing central station equivalent
1900										
1901										
1902										
1903										
1904										
1905										
1906										
1907										
1908										
1909					69.7	15.4	85.1	7.7	3.6	3.6
1910	407,000,000				70.2	14.8	85.0	8.1	3.5	3.4
1911	392,000,000				68.4	15.8	84.2	8.6	3.5	3.7
1912	436,000,000				70.8	13.8	84.6	8.3	3.6	3.5
1913	460,000,000				70.3	13.9	84.2	8.9	3.5	3.4
1914	409,000,000				67.0	15.0	82.0	10.3	3.9	3.8
1915	426,000,000				67.6	14.1	81.7	10.5	3.9	3.9
1916	494,000,000		169	18.5	69.4	12.5	81.9	10.2	4.3	3.6
1917	529,000,000	3.47	176	19.4	69.1	13.0	82.1	10.5	4.1	3.3
1918	531,000,000		174	19.2	69.9	12.4	82.3	10.9	3.6	3.2
1919	482,000,000	3.22	164	18.1	65.3	12.8	78.1	13.8	4.3	3.8
1920	509,000,000	3.04	174	18.8	67.0	11.0	78.0	14.9	3.8	3.3
1921	392,000,000	2.73	162	17.7	59.6	13.5	73.1	19.6	3.9	3.4
1922	427,000,000	2.51	163	17.9	61.1	8.2	69.3	22.7	4.5	3.5
1923	519,000,000	2.41	161	18.1	61.6	10.6	72.2	20.4	4.5	2.9
1924	484,000,000	2.22	149	17.0	58.4	11.0	69.4	21.9	5.7	3.0
1925	499,000,000	2.07	140	16.1	61.3	7.6	68.9	22.3	5.8	3.0
1926	533,000,000	1.95	137	15.8	61.4	9.4	70.8	20.4	5.8	3.0
1927	500,000,000	1.84	131	15.4	56.9	9.1	66.0	24.2	6.5	3.3
1928	499,000,000	1.76	127	15.0	55.6	8.7	64.3	24.9	7.2	3.6
1929	520,000,000	1.69	125	14.8	55.1	7.9	63.0	25.7	8.1	3.2
1930	455,000,000	1.62	121	14.7	53.9	8.3	62.2	25.3	9.2	3.3
1931	372,000,000	1.55	119	14.5	51.3	8.3	59.6	27.7	9.3	3.4
1932	306,917,000	1.50	123	14.9	48.2	8.1	56.3	29.6	9.9	4.2
1933	321,748,000	1.47	121	15.2	48.4	7.4	55.8	31.1	9.2	3.9
1934	347,043,000	1.47	122	15.2	49.0	8.1	57.1	29.4	9.9	3.6
1935	360,291,563	1.50	120	15.5	48.3	7.0	55.3	30.5	10.2	4.0
1936	422,795,741	1.44	119	15.3	50.2	6.5	56.7	29.6	10.2	3.5
1937	428,496,767	1.43	117	15.1	² 48.0	² 5.7	² 53.7	² 32.4	² 10.4	² 3.5
1938	344,649,800	1.41	115	14.9	(³)	(³)	(³)	(³)	(³)	(³)

¹ (U. S. Geological Survey), Mineral Resources of the United States, and (U. S. Bureau of Mines), Mineral Yearbooks.

² Preliminary figure.

³ Not available.

APPENDIX C

*Price indicators in the bituminous coal industry*¹

[Short tons of 2,000 pounds]

Year	Net income or deficit of the industry	Value f. o. b. mine	Cost of railroad fuel excluding freight rate	Spot price f. o. b. mine	Railroad freight rate	Whole-sale mine run composite	Whole-sale prepared sizes composite	Retail composite 38 cities
1900		\$1. 04						
1901		1. 05						
1902		1. 12						
1903		1. 24						
1904		1. 10						
1905		1. 06						
1906		1. 11		\$1. 21				
1907		1. 14		1. 18				
1908		1. 12		1. 05				
1909		1. 07		1. 04				
1910		1. 12		1. 23				
1911		1. 11		1. 07				
1912		1. 15		1. 21				
1913		1. 18		1. 23				\$5. 44
1914		1. 17		1. 14				5. 72
1915		1. 13		1. 12				5. 58
1916		1. 32		1. 85				5. 61
1917	+ \$203, 919, 000	2. 26		3. 25				7. 09
1918	+ 148, 847, 000	2. 58		2. 58				7. 80
1919	+ 62, 260, 000	2. 49		2. 59				8. 00
1920	+ 249, 367, 000	3. 75		5. 64				11. 26
1921	+ 28, 889, 000	2. 89		2. 55				10. 68
1922		3. 02		3. 64				10. 21
1923		2. 68		2. 77	\$2. 36	\$4. 83	\$5. 65	10. 33
1924		2. 20		2. 08		4. 21	4. 90	9. 18
1925	- 22, 363, 000	2. 04		2. 06		4. 12	4. 63	9. 07
1926		2. 66		2. 21		4. 31	4. 79	9. 33
1927		1. 99		1. 99		4. 26	4. 82	9. 28
1928	- 24, 508, 000	1. 86		1. 80	2. 27	4. 03	4. 47	8. 94
1929	- 11, 822, 000	1. 78	\$2. 01	1. 79	2. 25	3. 95	4. 38	8. 85
1930	- 42, 071, 000	1. 70		1. 75	2. 23	3. 91	4. 26	8. 86
1931	- 47, 745, 000	1. 54		1. 64	2. 22	3. 74	3. 97	8. 33
1932	- 51, 167, 000	1. 31	1. 66		2. 26	3. 64	3. 68	7. 71
1933	- 47, 549, 000	1. 34			2. 20	3. 67	3. 72	7. 65
1934	- 7, 584, 000	1. 75	1. 84		2. 15	4. 13	4. 32	8. 26
1935	- 15, 576, 000	1. 77	1. 89		2. 24	4. 24	4. 39	8. 30
1936	- 3, 310, 000	1. 83	1. 79		2. 25	4. 27	4. 48	8. 42
1937		1. 95	1. 89	2. 10	2. 17	4. 29	4. 51	8. 58
1938			1. 92	2. 04	2. 27	4. 33	4. 53	8. 61

¹ (U. S. Geological Survey), Mineral Resources of the United States, (U. S. Bureau of Mines), Mineral Yearbooks, (U. S. Department of Commerce) Survey of Current Business.

APPENDIX D

Labor statistics in bituminous coal mining

Year	Number of employees		Total wages ¹ (in thousands of dollars)	Year	Number of employees		Total wages ¹ (in thousands of dollars)
	Average for year ¹	Average for active mines ²			Average for year ¹	Average for active mines ²	
1909.....	511,700	543,000	³ 294,200	1934.....	423,400	458,000	367,950
1919.....	545,800	622,000	³ 682,600	1935.....	435,300	462,000	403,050
1929.....	458,700	503,000	³ 574,810	1936.....	447,200	477,204	475,490
1930.....	440,800	493,000	477,100	1937.....	455,500	491,864	508,510
1931.....	407,800	450,000	351,520	1938.....	397,700	441,333	390,360
1932.....	350,000	406,000	237,120	1939.....	360,500	-----	³ 402,010
1933.....	366,500	419,000	260,990				

¹ U. S. Bureau of Labor Statistics estimates. Employment figures represent average monthly employment throughout the year whether mines were operating or not.

² U. S. Bureau of Mines.

³ U. S. Census of Mines and Quarries.

APPENDIX E

BITUMINOUS COAL ACT OF 1937

[PUBLIC—No. 48—75TH CONGRESS]

[CHAPTER 127—1ST SESSION]

[H. R. 4985]

AN ACT

To regulate interstate commerce in bituminous coal, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That regulation of the sale and distribution in interstate commerce of bituminous coal is imperative for the protection of such commerce; that there exist practices and methods of distribution and marketing of such coal that waste the coal resources of the Nation and disorganize, burden, and obstruct interstate commerce in bituminous coal, with the result that regulation of the prices thereof and of unfair methods of competition therein is necessary to promote interstate commerce in bituminous coal and to remove burdens and obstructions therefrom.

NATIONAL BITUMINOUS COAL COMMISSION

SEC. 2. (a) There is hereby established in the Department of the Interior a National Bituminous Coal Commission (herein referred to as Commission), which shall be composed of seven members appointed by the President, by and with the advice and consent of the Senate, for a term of four years. The Commission shall annually designate its chairman, and shall have a seal which shall be judicially recognized. Any person appointed to fill a vacancy shall be appointed only for the unexpired term of his predecessor in office. The Commission shall have an office in the city of Washington, District of Columbia, and shall convene at such times and places as the majority of the Commission shall determine. Two members of the Commission shall have been experienced bituminous coal mine workers, two shall have had previous experience as producers, but none of the members shall have any financial interest, direct or indirect, in the mining, transportation, or sale of, or manufacture of equipment for, coal (whether or not bituminous coal), oil, or gas, or in the generation, transmission, or sale of hydro-electric power, or in the manufacture of equipment for the use thereof, and shall not actively engage in any other business, vocation, or employment. Not more than one commissioner shall be a resident of any one State, and not more than one commissioner shall be a resident of any one of the districts hereinafter established, but a change in any of the boundaries of the districts, made by the Commission as hereinafter provided, shall not affect the tenure of office of any commissioner

then serving. Any commissioner may be removed by the President for inefficiency, neglect of duty, or malfeasance in office. The Commission is authorized to appoint and fix the compensation and duties of a secretary and necessary professional, clerical, and other assistants. With the exception of the secretary, a clerk to each commissioner, the attorneys, the managers and employees of the statistical bureaus hereinafter provided for, and such special agents, technical experts, and examiners as the Commission may require, all employees of the Commission shall be appointed and their compensation fixed in accordance with the provisions of the civil-service laws and the Classification Act of 1923, as amended. No person appointed without regard to the provisions of the civil-service laws shall be related to any member of the Commission by marriage or within the third degree by blood. The Commission is authorized to accept and utilize voluntary and uncompensated services of any person or of any official of a State or political subdivision thereof. The members of the Commission shall each receive compensation at the rate of \$10,000 per year and necessary traveling expenses. Such Commission shall have the power to make and promulgate all reasonable rules and regulations for carrying out the provisions of this Act and shall annually make full report of its activities to the Secretary of the Interior for transmission to Congress. A majority of the Commission shall constitute a quorum for the transaction of business, and a vacancy in the Commission shall not impair the right of the remaining members to exercise all the power of the Commission. No order which is subject to judicial review under section 6, and no rule or regulation which has the force and effect of law, shall be made or prescribed by the Commission, unless it has given reasonable public notice of a hearing, and unless it has afforded to interested parties an opportunity to be heard, and unless it has made findings of fact. Such findings, if supported by substantial evidence shall be conclusive upon review thereof by any court of the United States. The Commission may establish divisions, each of which divisions shall consist of not less than three of its members, as it may deem necessary for the proper dispatch of its business. Each such division shall exercise all the powers and authority of the Commission in the premises: *Provided*, That any person in interest may, upon written petition, secure a review by the Commission of the report, finding, or order of such division. The Commission may by its order assign or refer any matter within its jurisdiction under this Act to an individual Commissioner, to a board composed of employees of the Commission, or to an examiner, to be designated by such order, for hearing and the recommendation of an appropriate order in the premises. Each individual Commissioner, board, or examiner, when so directed by order of the Commission, shall have power to administer oaths and affirmations, to examine witnesses, and receive evidence. The Commission is authorized to make contracts for personal services in the District of Columbia and elsewhere and to establish and maintain such offices throughout the United States as it deems necessary for the effective administration of this Act, but shall maintain its principal office in the District of Columbia.

The Commission is hereby authorized to initiate, promote, and conduct research designed to improve standards and methods used in the mining, preparation, conservation, distribution, and utilization

of coal and the discovery of additional uses for coal, and for such purposes shall have authority to assist educational, governmental, and other research institutions in conducting research in coal, and to do such other acts and things as it deems necessary and proper to promote the use of coal and its derivatives.

(b) (1) There is hereby established an office in the Department of the Interior to be known as the office of the consumers' counsel of the National Bituminous Coal Commission. The office shall be in charge of a counsel to be appointed by the President, by and with the advice and consent of the Senate. The counsel shall have no financial interest, direct or indirect, in the mining, transportation, or sale of, or the manufacture of equipment for, coal (whether or not bituminous coal), oil, or gas, or in the generation, transmission, or sale of hydroelectric power, or in the manufacture of equipment for the use thereof, and shall not actively engage in any other business, vocation, or employment. The counsel shall receive compensation, at the rate of \$10,000 per year and necessary traveling expenses.

(2) It shall be the duty of the counsel to appear in the interest of the consuming public in any proceeding before the Commission and to conduct such independent investigation of matters relative to the coal industry and the administration of this Act as he may deem necessary to enable him properly to represent the consuming public in any proceeding before the Commission. In any such proceeding before the Commission, the counsel shall have the right to offer any relevant testimony and argument, oral or written, and to examine and cross-examine witnesses and parties to the proceeding, and shall have the right to have subpoena or other process of the Commission issue in his behalf. Whenever the counsel finds that it is in the interest of the consuming public to have the Commission furnish any information at its command or conduct any investigation as to any matter within its authority, the counsel shall so certify to the Commission, specifying in the certificate the information or investigation desired. Thereupon the Commission shall promptly furnish to the counsel the information or promptly conduct the investigation and place the results thereof at the disposal of the counsel.

(3) The counsel is authorized to appoint and fix the compensation and duties of necessary professional, clerical, and other assistants. With the exception of a clerk to the counsel, the attorneys, and such special agents and experts as the counsel may from time to time find necessary for the conduct of his work, all employees of the counsel shall be appointed and their compensation fixed in accordance with the civil-service laws and the Classification Act of 1923, as amended. The counsel is authorized to make such expenditures as may be necessary for the performance of the duties vested in him.

(4) The counsel shall annually make a full report of the activities of his office directly to the Congress.

TAX ON COAL

SEC. 3. (a) There is hereby imposed upon the sale or other disposal of bituminous coal produced within the United States when sold or otherwise disposed of by the producer thereof an excise tax of 1 cent per ton of two thousand pounds.

The term "disposal" as used in this section includes consumption or use (whether in the production of coke or fuel, or otherwise) by a producer, and any transfer of title by the producer other than by sale.

(b) In addition to the tax imposed by subsection (a) of this section, there is hereby imposed upon the sale or other disposal of bituminous coal produced within the United States, when sold or otherwise disposed of by the producer thereof, which would be subject to the application of the conditions and provisions of the code provided for in section 4, or of the provisions of section 4-A, an excise tax in an amount equal to 19½ per centum of the sale price at the mine in the case of coal disposed of by sale at the mine, or in the case of coal disposed of otherwise than by sale at the mine, and coal sold otherwise than through an arms' length transaction, 19½ per centum of the fair market value of such coal at the time of such disposal or sale. In the case of any producer who is a code member as provided in section 4 and is so certified to the Commissioner of Internal Revenue by the Commission, the sale or disposal by such producer during the continuance of his membership in the code of coal produced by him shall be exempt from the tax imposed by this subsection.

(c) The taxes imposed by this section shall be paid to the United States by the producer, and shall be payable monthly for each calendar month on or before the first business day of the second succeeding month, under such regulations and in such manner as shall be prescribed by the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury.

(d) In the case of coal disposed of otherwise than by sale at the mine, and coal sold otherwise than through an arms' length transaction, the Commissioner of Internal Revenue shall determine the market value thereof. Such market value shall equal the current market price at the mine of coal of a comparable kind, quality, and size produced for market in the locality where the coal so disposed of is produced.

(e) The tax imposed by subsection (a) of this section shall not apply in the case of a sale of coal for the exclusive use of the United States or of any State or Territory of the United States or the District of Columbia, or any political subdivision of any of them, for use in the performance of governmental functions. Under regulations prescribed by the Commissioner of Internal Revenue with the approval of the Secretary of the Treasury, a credit against the tax imposed by subsection (a) of this section or a refund may be allowed or made to any producer of coal in the amount of such tax paid with respect to the sale of coal to any vendee, if the producer has in his possession such evidence as the regulations may prescribe that such coal was resold by any person for the exclusive use of the United States or of any State, Territory of the United States, or the District of Columbia, or any political subdivision of any of them, for use in the performance of governmental functions.

(f) No producer shall, by reason of his acceptance of the code provided for in section 4, or of the exemption from the tax provided in subsection (b) in this section, be held to be precluded or estopped from contesting the constitutionality of any provision of this Act or of the code, or the validity or application of either to him or to any part of the coal produced by him.

BITUMINOUS COAL CODE

SEC. 4. The provisions of this section shall be promulgated by the Commission as the "Bituminous Coal Code", and are herein referred to as the code.

Producers accepting membership in the code as provided in section 5 (a) shall be, and are herein referred to as, code members, and the provisions of such code shall apply only to such code members, except as otherwise provided by subsection (h) of part II of this section.

For the purpose of carrying out the declared policy of this Act, the code shall contain the following conditions and provisions, which are intended to regulate interstate commerce in bituminous coal and which shall be applicable only to matters and transactions in or directly affecting interstate commerce in bituminous coal:

PART I—ORGANIZATION

(a) Twenty-three district boards of code members shall be organized. Each district board shall consist of not less than three nor more than seventeen members. The number of members of the district board shall, subject to the approval of the Commission, be determined by the majority vote of the district tonnage during the calendar year 1936 represented at a meeting of the code members of the district called for the purpose of such determination and for the election of such district board; and all code members within the district shall be given notice of the time and place of the meeting. All but one of the members of the district board shall be code members or representatives of code members truly representative of all the mines of the district. The number of such producer members shall be an even number. One-half of such producer members shall be elected by the majority in number of the code members of the district represented at the aforesaid meeting. The other producer members shall be elected by votes cast in the proportion of the annual tonnage output of the code members in the district, for the calendar year preceding the date of the election: *Provided*, That not more than one officer or employee of any code member within a district shall be a member of the district board at the same time. The remaining member of each district board shall be selected by the organization of employees representing the preponderant number of employees in the industry of the district in question. The term of district board members shall be two years and until their successors are elected. The Commission shall have power to remove any member of any district board upon its finding, after due notice and hearing, that said member is guilty of inefficiency, willful neglect of duty, or malfeasance in office.

The district boards shall have power to adopt bylaws and rules of procedure, subject to approval of the Commission, and to appoint officers from within or without their own membership, to fix their terms and compensation, to provide for reports, and to employ such committees, employees, arbitrators, and other persons necessary to effectuate their purposes. Members of the district board shall serve, as such, without compensation but may be reimbursed for their reasonable expenses. The territorial boundaries or limits of the

twenty-three districts are set forth in the schedule entitled "Schedule of Districts" and annexed to this Act.

Whenever the Commission upon investigation instituted upon its own motion or upon petition of any code member,³ district board, State or political subdivision thereof, or the consumers' counsel, after hearing finds that the territorial boundaries or limits of any district or minimum-price area are such as to make it substantially impracticable to establish minimum prices in accordance with all the standards set forth in subsections (a) and (b) of part II of this section, and that a change in such territorial boundaries or limits or a division or consolidation of such districts or minimum-price areas would render the establishment of minimum prices in accordance with all such standards more practicable, it shall by order make such changes, divisions, and consolidations as it finds will substantially aid in such establishment of minimum prices.

(b) The expense of administering the code by the respective district boards shall be borne by the code members in the respective districts, each paying his proportionate share, as assessed, computed on a tonnage basis, in accordance with regulations prescribed by such boards with the approval of the Commission. Such assessments may be collected by the district board by action in any court of competent jurisdiction.

(c) Nothing contained in this Act shall constitute the members of a district board partners for any purpose. Nor shall any member of a district board or officer thereof be liable in any manner to anyone for any act of any other member, officer, agent, or employee of the district board. Nor shall any member or officer of a district board, exercising reasonable diligence in the conduct of his duties under this Act, be liable to anyone for any action or omission to act under this Act except for his own willful misfeasance or for nonfeasance involving moral turpitude.

(d) No action complying with the provisions of this section taken while this Act is in effect, or within sixty days thereafter, by any code member or by any district board, or officer thereof, shall be construed to be within the prohibitions of the antitrust laws of the United States.

PART II—MARKETING

The Commission shall have power to prescribe for code members minimum and maximum prices, and marketing rules and regulations, as follows:

(a) All code members shall report all spot orders to such statistical bureau hereinafter provided for as may be designated by the Commission and shall file with it copies of all contracts for the sale of coal, copies of all invoices, copies of all credit memoranda, and such other information concerning the preparation, cost, sale, and distribution of coal as the Commission may authorize or require. All such records shall be held by the statistical bureau as the confidential records of the code member filing such information.

For each district there shall be established by the Commission a statistical bureau which shall be operated and maintained as an agency of the Commission. Each statistical bureau shall be under the direction of a manager, who shall be appointed by the Commission. No producer, employee, or representative of a producer, and,

except as the Commission may specifically approve, no member of a district board or employee or representative thereof shall be an employee of any statistical bureau.

Each district board shall, from time to time on its own motion or when directed by the Commission, propose minimum prices free on board transportation facilities at the mines for kinds, qualities, and sizes of coal produced in said district, and classification of coal and price variations as to mines, consuming market areas, values as to uses and seasonal demand. Said prices shall be proposed so as to yield a return per net ton for each district in a minimum price area, as such districts are identified and such area is defined in the subjoined table designated "minimum-price-area table", equal as nearly as may be to the weighted average of the total costs, per net ton, determined as hereinafter provided, of the tonnage of such minimum price area. The computation of the total costs shall include the cost of labor, supplies, power, taxes, insurance, workmen's compensation, royalties, depreciation and depletion (as determined by the Bureau of Internal Revenue in the computation of the Federal income tax) and all other direct expenses of production, coal operators' association dues, district board assessments for Board operating expenses only levied under the code, and reasonable costs of selling and the cost of administration.

MINIMUM-PRICE-AREA TABLE

Area 1: Eastern Pennsylvania, district 1; western Pennsylvania, district 2; northern West Virginia, district 3; Ohio, district 4; Michigan, district 5; Panhandle, district 6; Southern numbered 1, district 7; Southern numbered 2, district 8; that part of Southeastern district 13, comprising Van Buren, Warren, and McMinn Counties in Tennessee.

Area 2: West Kentucky, district 9; Illinois, district 10; Indiana, district 11; Iowa, district 12.

Area 3: Southeastern, district 13, except Van Buren, Warren, and McMinn Counties in Tennessee.

Area 4: Arkansas-Oklahoma, district 14.

Area 5: Southwestern, district 15.

Area 6: Northern Colorado, district 16; southern Colorado, district 17; New Mexico, district 18.

Area 7: Wyoming, district 19; Utah, district 20.

Area 8: North Dakota and South Dakota, district 21.

Area 9: Montana, district 22.

Area 10: Washington and Alaska, district 23.

The minimum prices so proposed shall reflect, as nearly as possible, the relative market value of the various kinds, qualities, and sizes of coal, shall be just and equitable as between producers within the district, and shall have due regard to the interests of the consuming public. The procedure for proposal of minimum prices shall be in accordance with rules and regulations to be approved by the Commission.

A schedule of such proposed minimum prices, together with the data upon which they are computed, including, but without limitation, the factors considered in determining the price relationship, shall be submitted by the district board to the Commission, which

may approve, disapprove, or modify such proposed minimum prices to conform to the requirements of this subsection, which shall serve as the basis for the coordination provided for in the succeeding subsection (b): *Provided*, That all minimum prices proposed for any kind, quality, or size of coal for shipment into any consuming market area shall be just and equitable, as between producers within the district: *And provided further*, That no minimum price shall be proposed that permits dumping.

As soon as possible after its creation, each district board shall determine, from cost data submitted by the proper statistical bureau of the Commission, the weighted average of the total costs of the ascertainable tonnage produced in the district in the calendar year, 1936. The district board shall adjust the average costs so determined, as may be necessary to give effect to any changes in wage rates, hours of employment, or other factors substantially affecting costs, exclusive of seasonal changes, so as to reflect as accurately as possible any change or changes which may have been established since January 1, 1936. Such determination and the computations upon which it is based shall be promptly submitted to the Commission by each district board in the respective minimum-price area. The Commission shall thereupon determine the weighted average of the total costs of the tonnage for each minimum-price area in the calendar year 1936, adjusted as aforesaid, and transmit it to all the district boards within such minimum-price area. Said weighted average of the total costs shall be taken as the basis, to be effective until changed by the Commission, for the proposal and establishment of minimum prices. Thereafter, upon satisfactory proof made at any time by any district board of a change in excess of 2 cents per net ton of two thousand pounds in the weighted average of the total costs in the minimum-price area, exclusive of seasonal changes, the Commission shall increase or decrease the minimum prices accordingly. The weighted average figures of total cost determined as aforesaid shall be available to the public.

Each district board shall, on its own motion or when directed by the Commission, propose reasonable rules and regulations incidental to the sale and distribution, by code members within the district, of coal. Such rules and regulations shall not be inconsistent with the requirements of this section and shall conform to the standards of fair competition hereinafter established. Such rules and regulations shall be submitted by the district board to the Commission with a statement of the reasons therefor, and the Commission may approve, disapprove, or modify the same, for the purpose of coordination.

(b) District boards shall, under rules and regulations established by the Commission, coordinate in common consuming market areas upon a fair competitive basis the minimum prices and the rules and regulations proposed by them, respectively, under subsection (a) hereof. Such coordination, among other factors, but without limitation, shall take into account the various kinds, qualities, and sizes of coal, and transportation charges upon coal. All minimum prices proposed for any kind, quality, or size of coal for shipment into any common consuming market area shall be just and equitable, and not unduly prejudicial or preferential, as between and among districts, shall reflect, as nearly as possible, the relative market values, at points of delivery in each common consuming market area,

of the various kinds, qualities, and sizes of coal produced in the various districts, taking into account values as to uses, seasonal demand, transportation methods and charges and their effect upon a reasonable opportunity to compete on a fair basis, and the competitive relationships between coal and other forms of fuel and energy; and shall preserve as nearly as may be existing fair competitive opportunities. The minimum prices proposed as a result of such coordination shall not, as to any district, reduce or increase the return per net ton upon all the coal produced therein below or above the minimum return as provided in subsection (a) of this section by an amount greater than necessary to accomplish such coordination, to the end that the return per net ton upon the entire tonnage of the minimum price area shall approximate the weighted average of the total cost per net ton of the tonnage of such minimum price area. Such coordinated prices and rules and regulations, together with the data upon which they are predicated, shall be submitted to the Commission. The Commission shall thereupon establish, and from time to time, upon complaint or upon its own motion, review and revise the effective minimum prices and rules and regulations in accordance with the standards set forth in subsections (a) and (b) of part II of this section.

(c) When, in the public interest, the Commission deems it necessary to establish maximum prices for coal in order to protect the consumer of coal against unreasonably high prices therefor, the Commission shall have the power to establish maximum prices free on board transportation facilities for coal in any district. Such maximum prices shall be established at a uniform increase above the minimum prices in effect within the district at the time, so that in the aggregate the maximum prices shall yield a reasonable return above the weighted average total cost of the district: *Provided*, That no maximum price shall be established for any mine which shall not yield a fair return on the fair value of the property.

(d) If any code member or district board or member thereof, or any State or political subdivision of a State, or the consumers' counsel, shall be dissatisfied with such coordination of prices or rules and regulations, or by a failure to establish such coordination of prices or rules and regulations, or by any minimum or maximum prices established pursuant to subsections (b) or (c) of part II of this section, he or it shall have the right, by petition, to make complaint to the Commission, and the Commission shall, under rules and regulations established by it, and after notice and hearing, make such order as may be required to effectuate the purpose of subsections (b) and (c) of part II of this section. Pending final disposition of such petition, and upon reasonable showing of necessity therefor, the Commission may make such preliminary or temporary order as in its judgment may be appropriate, and not inconsistent with the provisions of this Act.

(e) No coal subject to the provisions of this section shall be sold or delivered or offered for sale at a price below the minimum or above the maximum therefor established by the Commission, and the sale or delivery or offer for sale of coal at a price below such minimum or above such maximum shall constitute a violation of the code: *Provided*, That the provisions of this paragraph shall not apply to a lawful and bona fide written contract entered into prior to June 16, 1933.

The making of a contract for the sale of coal at a price below the minimum or above the maximum therefor established by the Commission at the time of the making of the contract shall constitute a violation of the code, and such contract shall be invalid and unenforceable.

From and after the date of approval of this Act, until prices shall have been established pursuant to subsections (a) and (b) of part II of this section, no contract for the sale of coal shall be made providing for delivery for a period longer than thirty days from the date of the contract.

No contract shall be made for the sale of coal for delivery after the expiration date of this Act at a price below the minimum or above the maximum therefor established by the Commission and in effect at the time of making the contract.

The minimum prices established in accordance with the provisions of this section shall not apply to coal sold and shipped outside the domestic market. The domestic market shall include all points within the continental United States and Canada, and car-ferry shipments to the island of Cuba. Bunker coal delivered to steamships for consumption thereon shall be regarded as shipped within the domestic market. Maximum prices established in accordance with the provisions of this section shall not apply to coal sold and shipped outside the continental United States.

(f) All data, reports, and other information in the possession of any agency of the United States in relation to coal shall be available to the Commission and to the office of the consumers' counsel for the administration of this Act.

(g) The price provisions of this Act shall not be evaded or violated by or through the use of docks or other storage facilities or transportation facilities, or by or through the use of subsidiaries, affiliated sales or transportation companies or other intermediaries or instrumentalities, or by or through the absorption, directly or indirectly, of any transportation or incidental charge of whatsoever kind or character, or any part thereof. The Commission is hereby authorized, after investigation and hearing, and upon notice to the interested parties, to make and issue rules and regulations to make this subsection effective.

(h) The Commission shall, by order, prescribe due and reasonable maximum discounts or price allowances that may be made by code members to persons (whether or not code members), herein referred to as "distributors", who purchase coal for resale and resell it in not less than cargo or railroad carload lots; and shall require the maintenance and observance by such persons, in the resale of such coal, of the prices and marketing rules and regulations established under this section.

UNFAIR METHODS OF COMPETITION

(i) The following practices with respect to coal shall be unfair methods of competition and shall constitute violations of the code:

1. The consignment of unordered coal, or the forwarding of coal which has not actually been sold, consigned to the producer or his agent: *Provided, however,* That coal which has not actually been sold may be forwarded, consigned to the producer or his agent at rail or track yards, tidewater ports, river ports, or lake ports, or docks beyond such ports, when for application to any of the following

classes: Bunker coal, coal applicable against existing contracts, coal for storage (other than in railroad cars) by the producer or his agent in rail or track yards or on docks, wharves, or other yards for resale by the producer or his agent.

2. The adjustment of claims with purchasers of coal in such manner as to grant secret allowances, secret rebates, or secret concessions, or other price discrimination.

3. The prepayment of freight charges with intent to or having the effect of granting a discriminatory credit allowance.

4. The granting in any form of adjustments, allowances, discounts, credits, or refunds to purchasers or sellers of coal, for the purposes or with the effect of altering retroactively a price previously agreed upon, in such manner as to create price discrimination.

5. The predating or postdating of any invoice or contract for the purchase or sale of coal, except to conform to a bona-fide agreement for the purchase or sale entered into on the predate.

6. The payment or allowance in any form or by any device of rebates, refunds, credits, or unearned discounts, or the extension to certain purchasers of services or privileges not extended to all purchasers under like terms and conditions, or under similar circumstances.

7. The attempt to purchase business, or to obtain information concerning a competitor's business by concession, gifts, or bribes.

8. The intentional misrepresentation of any analysis or of analyses, or of sizes, or the intentional making, causing, or permitting to be made, or publishing, of any false, untrue, misleading, or deceptive statement by way of advertising, invoicing, or otherwise concerning the size, quality, character, nature, preparation, or origin of any coal bought, sold, or consigned.

9. The unauthorized use, whether in written or oral form, of trademarks, trade names, slogans, or advertising matter already adopted by a competitor, or any deceptive approximation thereof.

10. Inducing or attempting to induce, by any means or device whatsoever, a breach of contract between a competitor and his customer during the term of such contract.

11. Splitting or dividing commissions, brokers' fees, or brokerage discounts, or otherwise in any manner directly or indirectly using brokerage commissions or jobbers' arrangements or sales agencies for making discounts, allowances, or rebates, or prices other than those determined under this Act, to any industrial consumer or to any retailers, or to others, whether of a like or different class.

12. Selling to, or through, any broker, jobber, commission account, or sales agency, which is in fact or in effect an agency or an instrumentality of a retailer or an industrial consumer or of an organization of retailers or industrial consumers, whereby they are¹ any of them secure either directly or indirectly a discount, dividend, a allowance, or rebates, or a price other than that determined in the manner prescribed by this Act.

13. Employing any person or appointing any sales agent, at a compensation obviously disproportionate to the ordinary value of the service or services rendered, and whose employment or appointment is made with the primary intention and purpose of securing preferment with a purchaser or purchasers of coal.

¹ So in original.

It shall not be an unfair method of competition or a violation of the code or any requirement of this Act (1) to sell to or through any bona-fide and legitimate farmers' cooperative organization duly organized under the laws of any State, Territory, the District of Columbia, or the United States whether or not such organization grants rebates, discounts, patronage dividends, or other similar benefits to its members; (2) to sell through any intervening agency to any such cooperative organization; or (3) to pay or allow to any such cooperative organization or to any such intervening agency any discount, commission, rebate, or dividend ordinarily paid or allowed, or permitted by the code to be paid or allowed, to other purchasers for purchases in wholesale or middleman quantities.

(j) The Commission shall have jurisdiction to hear and determine written complaints made by any code member, district board, or member thereof, State or political subdivision of a State, or the consumers' counsel, which charge any violation of the code specified in part II of this section. It shall make and publish rules and regulations for the consideration and hearing of any such complaint, and all interested parties shall be required to conform thereto. The Commission shall make due effort toward adjustment of such complaints and shall endeavor to compose the differences of the parties, and shall make such order or orders in the premises, from time to time, as the facts and the circumstances warrant. Any such order shall be subject to review as are other orders of the Commission.

(k) In the investigation of any complaint or violation of the code, or of any rule or regulation the observance of which is required under the terms thereof, the Commission shall have power by order to require such reports from, and shall be given access to inspect the books and records of, code members to the extent deemed necessary for the purpose of determining the complaint. Any such order shall be subject to review as are other orders of the Commission.

(l) The provisions of this section shall not apply to coal consumed by the producer or to coal transported by the producer to himself for consumption by him.

SEC. 4-A. Whenever the Commission upon investigation instituted upon its own motion or upon petition of any code member, district board, State or political subdivision thereof, or the consumers' counsel, after hearing finds that transactions in coal in intrastate commerce by any person or in any locality cause any undue or unreasonable advantage, preference, or prejudice as between persons and localities in such commerce on the one hand and interstate commerce in coal on the other hand, or any undue, unreasonable, or unjust discrimination against interstate commerce in coal, or in any manner directly affect interstate commerce in coal, the Commission shall by order so declare and thereafter coal sold, delivered or offered for sale in such intrastate commerce shall be subject to the provisions of section 4.

Any producer believing that any commerce in coal is not subject to the provisions of section 4 or to the provisions of the first paragraph of this section may file with the Commission an application, verified by oath or affirmation for exemption, setting forth the facts upon which such claim is based. The filing of such application in good faith shall exempt the applicant, beginning with the third day following the filing of the application, from any obligation, duty, or

liability imposed by section 4 with respect to the commerce covered by the application until such time as the Commission shall act upon the application. If the Commission has reason to believe that such exemption during the period prior to action upon the application is likely to permit evasion of the Act with respect to commerce in coal properly subject to the provisions of section 4 or of the first paragraph of this section, it may suspend the exemption for a period not to exceed ten days. Within a reasonable time after the receipt of any application for exemption the Commission shall enter an order granting, or, after notice and opportunity for hearing, denying or otherwise disposing of such application. As a condition to the entry of and as a part of an order granting such application, the Commission may require the applicant to apply periodically for renewals of such order and to file such periodic reports as the Commission may find necessary or appropriate to enable it to determine whether the conditions supporting the exemption continue to exist. Any applicant aggrieved by an order denying or otherwise disposing of an application for exemption by the Commission may obtain a review of such order in the manner provided in subsection (b) of section 6.

ORGANIZATION OF THE CODE

SEC. 5 (a) Upon the appointment of the Commission it shall at once promulgate said code and assist in the organization of the district boards as provided for in section 4, and shall prepare and supply to all coal producers forms of acceptance for membership therein. Such forms of acceptances, when executed, shall be acknowledged before any official authorized to take acknowledgments.

(b) The membership of any such coal producer in such code and his right to an exemption from the taxes imposed by section 3 (b) of this Act, may be revoked by the Commission upon written complaint by any code member or district board, or any State or political subdivision of a State, or the consumers' counsel, after a hearing, with thirty days' written notice to the member, upon proof that such member has willfully violated any provision of the code or any regulation made thereunder; and in such a hearing any code member or district board, or any State or political subdivision of a State, or the consumers' counsel, or any consumer or employee, and the Commissioner of Internal Revenue, shall be entitled to present evidence and be heard: *Provided*, That the Commission, in its discretion, may in such case make an order directing the code member to cease and desist from violations of the code and regulations made thereunder and upon failure of the code member to comply with such order the Commission may apply to a circuit court of appeals to enforce such order in accordance with the provisions of subsection (c) of section 6 or may reopen the case upon ten days' notice to the code member affected and proceed in the hearing thereof as above provided.

The Commission shall keep a record of the evidence heard by it in any proceeding to cancel or revoke the membership of any code member and its findings of fact, if supported by substantial evidence, shall be conclusive upon any proceeding to review the action and order of the Commission in any court of the United States.

In making an order revoking membership in the code as in this subsection provided, the Commission shall specifically find (1) the day or days on which the violations occurred; (2) the quantity of

coal sold or otherwise disposed of in violation of the code or regulations thereunder; (3) the sales price at the mine or the market value at the mine if disposed of otherwise than by sale at the mine, or if sold otherwise than through an arms' length transaction, of the coal sold or otherwise disposed of by such code member in violation of the code or regulations thereunder; (4) the minimum price established by the Commission for such coal and in effect at the time of such sale or other disposal; (5) the amount of tax required to be paid by the code member as a condition to reinstatement to membership in the code as in subsection (c) hereof provided.

(c) Any producer whose membership in the code and whose right to an exemption from the tax imposed by section 3 (b) of this Act shall have been revoked and canceled may apply to the Commission and shall have the right to have his membership in the code restored upon payment by him to the United States of double the amount of the tax provided in section 3 (b) upon the sales price at the mine, or the market value at the mine if disposed of otherwise than by sale at the mine, or if sold otherwise than through an arms' length transaction, of the coal sold or disposed of by the code member in violation of the code or regulations thereunder (but in no case shall such sales price or market value be taken to be less than the minimum price established by the Commission for such coal and in effect at the time of such sale or other disposal), as found by the Commission under subsection (b) hereof. The Commission shall thereupon certify to the Commissioner of Internal Revenue and to the collector of internal revenue for the internal revenue collection district in which the producer resides the amount of the required payment as found under clause (5) of subsection (b), and upon payment of such amount to the Commissioner or the collector such officer shall notify the Commission thereof.

(d) Any code member who shall be injured in his business or property by any other code member by reason of the doing of any act which is forbidden or the failure to do any act which is required by this Act or by the code or any regulation made thereunder, may sue therefor in any court of competent jurisdiction where the defendant resides, or is found or has an agent or a place of business, without respect to the amount in controversy, and shall recover threefold damages by him sustained, and the cost of suit, including a reasonable attorney's fee.

SEC. 6. (a) All rules, regulations, determinations, and promulgations of any district board shall be subject to review by the Commission upon appeal by any producer and upon just cause shown shall be amenable to the order of the Commission; and appeal to the Commission shall be a matter of right in all cases to every producer and to all parties in interest, including any State or any political subdivision thereof. In the event that a district board shall fail, for any reason, to take action authorized or required by this Act, then the Commission may take such action in lieu of the district board. The Commission may also provide rules for the determination of controversies arising under this Act by voluntary submission thereof to arbitration, which determination shall be final and conclusive.

(b) Any person aggrieved by an order issued by the Commission in a proceeding to which such person is a party may obtain a review of such order in the Circuit Court of Appeals of the United States,

within any circuit wherein such person resides or has his principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the entry of such order, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall be forthwith served upon any member of the Commission and thereupon the Commission shall certify and file in the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, and enforce or set aside such order, in whole or in part. No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged below. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If either party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the hearing before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts, by reason of the additional evidence so taken, and it shall file such modified or new findings, which, if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, and enforcing or setting aside, in whole or in part, any such order of the Commission shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 239 and 240 of the Judicial Code, as amended (U. S. C., title 28, secs. 346 and 347).

The commencement of proceedings under this subsection shall not, unless specifically ordered by the court, operate as a stay of the Commission's order.

(c) If any code member fails or neglects to obey any order of the Commission while the same is in effect, the Commission in its discretion may apply to the Circuit Court of Appeals of the United States within any circuit where such code member resides or carries on business, for the enforcement of its order, and shall certify and file with its application a transcript of the entire record in the proceeding, including all the testimony taken and the report and order of the Commission. Upon such filing of the application and transcript the court shall cause notice thereof to be served upon such code member and thereupon shall have jurisdiction of the proceeding and of the question determined therein, and shall have power to make and enter upon the pleadings, testimony, and proceedings set forth in such transcript a decree affirming, modifying, or setting aside the order of the Commission. The findings of the Commission as to facts, if supported by substantial evidence, shall be conclusive. If either party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the pro-

ceeding before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper.

The Commission may modify its findings as to the facts or make new findings, by reason of the additional evidence so taken, and it shall file such modified or new findings, which if supported by substantial evidence shall be conclusive, and its recommendation, if any, for the modification or setting aside of its original order, with the return of such additional evidence. The judgment and decree of the court shall be final, except that the same shall be subject to review by the Supreme Court upon certiorari or certification as provided in sections 239 and 240 of the Judicial Code, as amended (U. S. C., title 28, secs. 346 and 347).

(d) The jurisdiction of the Circuit Court of Appeals of the United States or the United States Court of Appeals for the District of Columbia, as the case may be, to enforce, set aside, or modify orders of the Commission shall be exclusive.

SEC. 7. All provisions of law, including penalties and refunds, applicable in respect of the taxes imposed by Title IV of the Revenue Act of 1932, as amended, shall, insofar as applicable and not inconsistent with the provisions of this Act, be applicable with respect to taxes imposed under this Act.

SEC. 8. (a) The members of the Commission are authorized to administer oaths to witnesses appearing before the Commission and to authorize the taking of depositions in any proceedings; and, for the purpose of conducting its investigations, said Commission shall have full power to issue subpoenas and subpoenas duces tecum, which shall be as nearly as may be in the form of subpoenas issued by district courts of the United States. In case of contumacy by, or refusal to obey a subpoena issued to, any person, the Commission may invoke the aid of any court of the United States within the jurisdiction of which such investigation or proceeding is carried on, or where such person resides or carries on business, in requiring the attendance and testimony of witnesses and the production of books, papers, correspondence, memoranda, and other records. Upon the filing of the application for such aid with the clerk of the court the court shall, either in term time or vacation, forthwith enter an order of record, requiring such person to appear before such court at a time stated in the order not more than ten days from the entry of the order (unless for good cause shown such time is extended), and show cause why he should not be required to obey such subpoena, and upon his failure to show cause it shall be the duty of the court to order such witness to appear before the said Commission and give such testimony or produce such evidence as may be lawfully required by said Commission. The district court, either in term time or vacation, shall have full power to punish for contempt as in other cases of refusal to obey the process and order of such court. Witnesses summoned before the Commission or when depositions are taken upon order of the Commission, shall be paid the same fees and mileage as are paid witnesses in the courts of the United States, and officers taking such depositions shall be paid the same fees as are paid for like services in courts of the United States.

(b) No person shall be excused from attending and testifying or from producing books, papers, contracts, agreements, and other

records and documents before the Commission, or in obedience to the subpoena of the Commission or any member thereof or any officer designated by it, or in any cause or proceeding instituted by the Commission, on the ground that the testimony or evidence, documentary or otherwise, required of him may tend to incriminate him or subject him to a penalty or forfeiture; but no individual shall be prosecuted or subject to any penalty or forfeiture for or on account of any transaction, matter, or thing concerning which he is compelled, after having claimed his privilege against self-incrimination, to testify or produce evidence, documentary or otherwise, except that such individual so testifying shall not be exempt from prosecution and punishment for perjury committed in so testifying.

SEC. 9. (a) It is hereby declared to be the public policy of the United States that—

(1) Employees of producers of coal shall have the right to organize and to bargain collectively with respect to their hours of labor, wages, and working conditions through representatives of their own choosing, without restraint, coercion, or interference on the part of the producers.

(2) No producer shall interfere with, restrain, or coerce employees in the exercise of their said rights, nor discharge or discriminate against any employee for the exercise of such rights.

(3) No employee of any producer and no one seeking employment with him or it shall be required as a condition of employment to join any association of employees for collective bargaining in the management of which the producer has any share of direction or control.

(b) No coal (except coal with respect to which no bid is required by law prior to purchase thereof) shall be purchased by the United States, or by any department or agency thereof, produced at any mine where the producer failed at the time of the production of such coal to accord to his or its employees the rights set forth in subsection (a) of this section.

(c) On the complaint of any employee of a producer of coal, or other interested party, the Commission may hold a hearing to determine whether any producer supplying coal for the use of the United States or any agency thereof, is complying with the provisions of subsection (a) of this section. If the Commission shall find that such producer is not complying with such provisions, it shall certify its findings to the department or agency concerned. Such department or agency shall thereupon declare the contract for the supply of the coal of such producer to be canceled and terminated.

(d) Nothing contained in this Act or section shall be construed to repeal or modify the provisions of the Act of March 23, 1932 (ch. 90, 47 Stat. 70), or of the Act of July 5, 1935 (ch. 372, 49 Stat. 449), known as the National Labor Relations Act, or of any other Act of Congress regarding labor relations or rights of employees to organize or bargain collectively, or of the Act of June 30, 1936 (ch. 881, 49 Stat. 2036).

SEC. 10. (a) The Commission may require reports from producers and may use such other sources of information available as it deems advisable, and may require producers to maintain a uniform system of accounting of costs, wages, operations, sales, profits, losses, and such other matters as may be required in the administration of this

Act. No information obtained from a producer disclosing costs of production or sales realization shall be made public without the consent of the producer from whom the same shall have been obtained, except where such disclosure is made in evidence in any hearing before the Commission or any court and except that such information may be compiled in composite form in such manner as shall not be injurious to the interests of any producer and, as so compiled, may be published by the Commission.

(b). Any officer or employee of the Commission or of any district board who shall, in violation of the provisions of subsection (a), make public any information obtained by the Commission or the district board, without its authority, unless directed by a court, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine not exceeding \$500, or by imprisonment not exceeding six months, or by both fine and imprisonment, in the discretion of the court.

(c) If any producer required by this Act or the code or regulation made thereunder to file a report shall fail to do so within the time fixed for filing the same, and such failure shall continue for fifteen days after notice of such default, the producer shall forfeit to the United States the sum of \$50 for each and every day of the continuance of such failure, which forfeiture shall be payable into the Treasury of the United States, and shall be recoverable in a civil suit in the name of the United States, brought in the district where the producer has his principal office or in any district in which he shall do business. It shall be the duty of the various district attorneys, under the direction of the Attorney General of the United States, to prosecute for the recovery of forfeiture.

SEC. 11. State laws regulating the mining of coal not inconsistent herewith are not affected by this Act.

SEC. 12. Any combination between producers creating a marketing agency for the disposal of competitive coals in interstate commerce or in intrastate commerce directly affecting interstate commerce in coal at prices to be determined by such agency, or by the agreement of the producers operating through such agency, shall, after promulgation of the code provided for in section 4, be unlawful as a restraint of interstate trade and commerce within the provisions of the Act of Congress of July 2, 1890, known as the Sherman Act, and Acts amendatory and supplemental thereto, unless such producers have accepted the code provided for in section 4 and shall comply with its provisions.

Subject to the approval of the Commission, a marketing agency may, as to its members, or such marketing agencies may, as between and among themselves, provide for the cooperative marketing of their coal, at prices not below the effective minimum prices nor above the effective maximum prices prescribed in accordance with section 4: *Provided*, That no such approval shall be granted by the Commission unless it shall find that the agreement under which such agency or agencies propose to function (1) will not unreasonably restrict the supply of coal in interstate commerce, (2) will not prevent the public from receiving coal at fair and reasonable prices, (3) will not operate against the public interest, and (4) that each such agency and its members have agreed to observe the effective marketing regulations and minimum and maximum prices from time to time estab-

lished by the Commission and otherwise to conduct the business and operations of the agency in conformity with reasonable regulations for the protection of the public interest, to be prescribed by the Commission.

The Commission may, by order, upon complaint of any code member, district board, or member thereof, any State or political subdivision thereof, the consumers' counsel or any other interested person, or on its own motion, suspend or revoke its prior approval of any such marketing agency agreement upon finding that the regulations and orders of the Commission or the requirements of this section have been violated. Unless and until the approval of the Commission is suspended or revoked, neither the agreement creating such marketing agency nor any agreement between such agencies, which has been approved by the Commission, nor any act done in pursuance thereof, by such agency or agencies, or the members thereof, and not in violation of the terms of the Commission's approval, shall be construed to be within the prohibitions of the antitrust laws of the United States.

SEC. 13. If any provision of this Act or the code provided herein, or any section, subsection, paragraph, or proviso, or the application thereof to any person or circumstances, is held invalid, the remainder of this Act or code, and the application thereof to other persons or circumstances, shall not be affected thereby; and if either or any of the provisions of this Act or code relating to prices or unfair methods of competition shall be found to be invalid, they shall be held separable from other provisions not in themselves found to be invalid.

OTHER DUTIES OF THE COMMISSION

SEC. 14. (a) The Commission shall study and investigate the matter of increasing the uses of coal and the problems of its importation and exportation; and shall further investigate—

(1) The economic operations of mines with the view to the conservation of the national coal resources.

(2) The safe operation of mines for the purposes of minimizing working hazards, and for such purpose shall be authorized to utilize the services of the Bureau of Mines.

(3) The problem of marketing to lower distributing costs for the benefit of consumers.

(4) The Commission shall, as soon as reasonably possible after its appointment, investigate the necessity for the control of production of coal and methods of such control, including allotment of output to districts and producers within such districts and shall hold hearings thereon.

(b) The Commission shall annually report the results of its investigations under this section, together with its recommendations, to the Secretary of the Interior for transmission by him to Congress.

SEC. 15. Upon substantial complaint that coal prices are excessive, and oppressive of consumers, or that any district board, or producers' marketing agency, is operating against the public interest, or in violation of this Act, the Commission may hear such complaint, and its findings shall be made public; and the Commission shall make proper orders within the purview of this Act so as to correct such abuses. The Commission may institute proceedings under this sec-

tion, and complaints may be made by any State or political subdivision of a State or by the consumers' counsel.

SEC. 16. To safeguard the interests of those concerned in the mining, transportation, selling, and consumption of coal, the Commission or the office of consumers' counsel is hereby vested with authority to make complaint to the Interstate Commerce Commission with respect to rates, charges, tariffs, and practices relating to the transportation of coal, and to prosecute the same. Before proceeding to hear and dispose of any complaint filed by another than the Commission, involving the transportation of coal, the Interstate Commerce Commission shall cause the Commission and the office of consumers' counsel to be notified of the proceeding and, upon application to the Interstate Commerce Commission, shall permit the Commission and consumers' counsel to appear and be heard. The Interstate Commerce Commission is authorized to avail itself of the cooperation, services, records, and facilities of the Commission.

SEC. 17. As used in this Act—

(a) The term "coal" means bituminous coal.

(b) The term "bituminous coal" includes all bituminous, semi-bituminous, and subbituminous coal and shall exclude lignite, which is defined as a lignitic coal having calorific value in British thermal units of less than seven thousand six hundred per pound and having a natural moisture content in place in the mine of 30 per centum or more.

(c) The term "producer" includes all individuals, firms, associations, corporations, trustees, and receivers engaged in the business of mining coal.

(d) The term "interstate commerce" means commerce among the several States and Territories, with foreign nations, and with the District of Columbia.

(e) The term "United States" when used in a geographical sense includes only the States, the Territories of Alaska and Hawaii, and the District of Columbia.

SEC. 18. Section 3 of this Act shall become effective on the first day of the second calendar month after the enactment of this Act, unless the Commission shall not at that time have promulgated the code and forms of acceptance for membership therein, in which event section 3 of this Act shall become effective from and after the date when the Commission shall have promulgated the code and such forms of acceptances, which date shall be promulgated by Executive order of the President of the United States. All other sections, except section 20 (a), of this Act shall become effective on the day of the approval of this Act.

SEC. 19. This Act shall cease to be in effect (except as provided in section 13 of the Revised Statutes) and any agencies and offices established thereunder shall cease to exist on and after four years from the date of the approval of this Act.

SEC. 20. (a) The Bituminous Coal Conservation Act of 1935 is hereby repealed, but such repeal shall not be effective until the consumers' counsel and a majority of the members of the Commission have been appointed.

(b) There is hereby authorized to be appropriated from time to time such sums as may be necessary for the administration of this Act. All sums heretofore or hereafter appropriated or made avail-

able to the National Bituminous Coal Commission and to the consumers' counsel of the National Bituminous Coal Commission established under the Bituminous Coal Conservation Act of 1935 are hereby transferred and made available for the uses and during the periods for which appropriated, in the administration of this Act by the National Bituminous Coal Commission and the office of the consumers' counsel herein created.

(c) The records, property, and equipment of the National Bituminous Coal Commission and the consumers' counsel, respectively, established under the Bituminous Coal Conservation Act of 1935 are hereby transferred to the Commission and the consumers' counsel, respectively, established under this Act.

SEC. 21. This Act may be cited as the Bituminous Coal Act of 1937.

ANNEX TO ACT—SCHEDULE OF DISTRICTS

EASTERN PENNSYLVANIA

District 1. The following counties in Pennsylvania: Bedford, Blair, Bradford, Cambria, Cameron, Centre, Clarion, Clearfield, Clinton, Elk, Forest, Fulton, Huntingdon, Jefferson, Lycoming, McKean, Mifflin, Potter, Somerset, Tioga.

Armstrong County, including mines served by the P. & S. R. R. on the west bank of the Allegheny River, and north of the Conemaugh division of the Pennsylvania Railroad.

Fayette County, all mines on and east of the line of Indian Creek Valley branch of the Baltimore and Ohio Railroad.

Indiana County, north of but excluding the Saltsburg branch of the Pennsylvania Railroad between Edri and Blairsville, both exclusive.

Westmoreland County, including all mines served by the Pennsylvania Railroad, Torrance, and east.

All coal-producing counties in the State of Maryland.

The following counties in West Virginia: Grant, Mineral, and Tucker.

WESTERN PENNSYLVANIA

District 2. The following counties in Pennsylvania: Allegheny, Beaver, Butler, Greene, Lawrence, Mercer, Venango, Washington.

Armstrong County, west of the Allegheny River and exclusive of mines served by the P. & S. R. R.

Indiana County, including all mines served on the Saltsburg branch of the Pennsylvania Railroad north of Conemaugh River.

Fayette County, except all mines on and east of the line of Indian Creek Valley branch of the Baltimore and Ohio Railroad.

Westmoreland County, including all mines except those served by the Pennsylvania Railroad from Torrance, east.

NORTHERN WEST VIRGINIA

District 3. The following counties in West Virginia: Barbour, Braxton, Calhoun, Doddridge, Gilmer, Harrison, Jackson, Lewis, Marion, Monongalia, Pleasants, Preston, Randolph, Ritchie, Roane, Taylor, Tyler, Upshur, Webster, Wetzel, Wirt, Wood.

That part of Nicholas County including mines served by the Baltimore and Ohio Railroad and north.

OHIO

District 4. All coal-producing counties in Ohio.

MICHIGAN

District 5. All coal-producing counties in Michigan.

PANHANDLE

District 6. The following counties in West Virginia: Brooke, Hancock, Marshall, and Ohio.

SOUTHERN NUMBERED 1

District 7. The following counties in West Virginia: Greenbrier, Mercer, Monroe, Pocahontas, Summers.

Fayette County, east of Gauley River and including the Gauley River branch of the Chesapeake and Ohio Railroad and mines served by the Virginian Railway.

McDowell County, that portion served by the Dry Fork branch of the Norfolk and Western Railroad and east thereof.

Raleigh County, excluding all mines on the Coal River branch of the Chesapeake and Ohio Railroad.

Wyoming County, that portion served by the Gilbert branch of the Virginian Railway lying east of the mouth of Skin Fork of Guyandot River and that portion served by the main line and the Glen Rogers branch of the Virginian Railway.

The following counties in Virginia: Montgomery, Pulaski, Wythe, Giles, Craig.

Tazewell County, that portion served by the Dry Fork branch to Cedar Bluff and from Bluestone Junction to Boissevain branch of the Norfolk and Western Railroad and Richlands-Jewell Ridge branch of the Norfolk and Western Railroad.

Buchanan County, that portion served by the Richlands-Jewell Ridge branch of the Norfolk and Western Railroad and that portion of said county on the headwaters of Dismal Creek, east of Lynn Camp Creek (a tributary of Dismal Creek).

SOUTHERN NUMBERED 2

District 8. The following counties in West Virginia: Boone, Clay, Kanawha, Lincoln, Logan, Mason, Mingo, Putnam, Wayne, Cabell.

Fayette County, west of, but not including mines of the Gauley River branch of the Chesapeake and Ohio Railroad.

McDowell County, that portion not served by and lying west of the Dry Fork branch of the Norfolk and Western Railroad.

Raleigh County, all mines on the Coal River branch of the Chesapeake and Ohio Railroad and north thereof.

Nicholas County, that part south of and not served by the Baltimore and Ohio Railroad.

Wyoming County, that portion served by Gilbert branch of the Virginian Railway lying west of the mouth of Skin Fork of Guyandot River.

The following counties in Virginia: Dickinson, Lee, Russell, Scott, Wise.

All of Buchanan County, except that portion on the headwaters of Dismal Creek, east of Lynn Camp Creek (tributary of Dismal Creek) and that portion served by the Richlands-Jewell Ridge branch of the Norfolk and Western Railroad.

Tazewell County, except portions served by the Dry Fork branch of Norfolk and Western Railroad and branch from Bluestone Junction to Boissevain of Norfolk and Western Railroad and Richlands-Jewell Ridge branch of the Norfolk and Western Railroad.

The following counties in Kentucky: Bell, Boyd, Breathitt, Carter, Clay, Elliott, Floyd, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, McCreary, Magoffin, Martin, Morgan, Owsley, Perry, Pike, Rockcastle, Wayne, Whitley.

The following counties in Tennessee: Anderson, Campbell, Claiborne, Cumberland, Fentress, Morgan, Overton, Roane, Scott.

The following counties in North Carolina: Lee, Chatham, Moore.

WEST KENTUCKY

District 9. The following counties in Kentucky: Butler, Christian, Crittenden, Daviess, Hancock, Henderson, Hopkins, Logan, McLean, Muhlenberg, Ohio, Simpson, Todd, Union, Warren, Webster.

ILLINOIS

District 10. All coal-producing counties in Illinois.

INDIANA

District 11. All coal-producing counties in Indiana.

IOWA

District 12. All coal-producing counties in Iowa.

SOUTHEASTERN

District 13. All coal-producing counties in Alabama.

The following counties in Georgia: Dade, Walker.

The following counties in Tennessee: Marion, Grundy, Hamilton, Bledsoe, Sequatchie, White, Van Buren, Warren, McMinn, Rhea.

ARKANSAS-OKLAHOMA

District 14. The following counties in Arkansas: All counties in the State.

The following counties in Oklahoma: Haskell, Le Flore, Sequoyah.

SOUTHWESTERN

District 15. All coal-producing counties in Kansas. All coal-producing counties in Texas. All coal-producing counties in Missouri.

The following counties in Oklahoma: Coal, Craig, Latimer, Muskogee, Okmulgee, Pittsburg, Rogers, Tulsa, Wagoner.

NORTHERN COLORADO

District 16. The following counties in Colorado: Adams, Arapahoe, Boulder, Douglas, Elbert, El Paso, Jackson, Jefferson, Larimer, Weld.

SOUTHERN COLORADO

District 17. The following counties in Colorado: All counties not included in northern Colorado district.

The following counties in New Mexico: All coal-producing counties in the State of New Mexico, except those included in the New Mexico district.

NEW MEXICO

District 18. The following counties in New Mexico: Grant, Lincoln, McKinley, Rio Arriba, Sandoval, San Juan, San Miguel, Santa Fe, Socorro.

The following counties in Arizona: Pinal, Navajo, Graham, Apache, Coconino.

All coal-producing counties in California.

WYOMING

District 19. All coal-producing counties in Wyoming.

The following counties in Idaho: Fremont, Jefferson, Madison, Teton, Bonneville, Bingham, Bannock, Power, Caribou, Oneida, Franklin, Bear Lake.

UTAH

District 20. All coal-producing counties in Utah.

NORTH DAKOTA-SOUTH DAKOTA

District 21. All coal-producing counties in North Dakota. All coal-producing counties in South Dakota.

MONTANA

District 22. All coal-producing counties in Montana.

WASHINGTON

District 23. All coal-producing counties in Washington. All coal-producing counties in Oregon.

The Territory of Alaska.

Approved, April 26, 1937.

APPENDIX F

THE PROBLEM OF CONSERVATION

WASTED RESOURCES

The purpose of the conservation movement, in its inception, was twofold—the protection of the public domain against exploitation by private interests, and the prevention of physical waste of natural resources. The first has been accomplished. The latter purpose has only in part been attained. Much oil has been left underground because of loss of pressure due to too rapid withdrawal from many wells over a pool. In Texas alone, the losses and waste of natural gas, amounted to 380,141,000,000 cubic feet in 1935.¹ This was reduced to a total of 91,300,000,000 cubic feet in 1937.² In California 15,961,900,000 cubic feet or 4.5 percent of the total output in 1937, was blown into the air.³ One well in Wyoming blew into the air an estimated 20,000,000,000 cubic feet of natural gas before it was brought under control.⁴

For bituminous coal, fortunately, State regulation is leading to reduced waste of this resource. The 10 major producing States east of the Mississippi River (Alabama, Illinois, Indiana, Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia) account for about 90 percent of the total production in the United States. Of the potentially marketable bituminous coal underground in these States, about 35 percent is lost in the process of mining. Approximately 20 percent of this loss is avoidable and 15 percent unavoidable. The United States Coal Commission, in its report published in 1925,⁵ summarizes coal losses in the ten most important producing States in 1921 (the year of post-war depression, when prices fell off 85 cents a ton on the average). This total loss, reaching 35 percent in 1921, occurs in—

- (1) coal left in the roof and floor;
- (2) coal lost in the room, entry, and panel or rib pillars;
- (3) coal pillars left to protect oil and gas wells and to support the surface;
- (4) coal left under railroads, buildings, and boundaries;
- (5) coal lost in handling and preparation both underground and on the surface;
- (6) coal lost because of irregular operation of the mine;
- (7) coal left because of rolls, thin or dirty areas, partings and streams;
- (8) coal lost in overlying beds due to having mined the lower beds first; and
- (9) coal lost in mines abandoned prematurely.

¹ U. S. Bureau of Mines, *Minerals Yearbook*, 1937, p. 1060; "Gas Wastage Orgy Near End in Texas," the *New York Times* (May 12, 1935) sec. 4, p. 6, c. 3.

² U. S. Bureau of Mines, *Minerals Yearbook*, 1938, p. 926.

³ *Ibid.* p. 914.

⁴ *Ibid.* p. 929.

⁵ Vol. I, p. 188.

The greatest loss in mining has occurred in (2) above, where the loss varies from 5 to 45 percent, of which from 3 to 36 percent is avoidable, depending upon conditions in the mines. The other losses are avoidable in varying degrees. For instance, the Coal Commission in the same report commented upon the irregular operation of mines (6) as a contributor to waste, as follows: "Storage of coal by consumers is the balance wheel between fluctuating consumption and variable production. Regular, systematic, large-scale storage of bituminous coal, then, is the public's largest opportunity in helping solve the coal problem, and the consumer's responsibility may be said to be proportionate to his annual requirements." The problem of seasonal operation is still a major one. The present Commission, in its proposed price schedule, includes seasonal price variations to encourage such storage. It must not be forgotten, however, that large-scale storage in heavy industrial centers is often limited by available space or the excessive cost of space.

RESERVES OF MINERAL FUELS

The problem of conservation is not limited to resources the supplies of which are nearing exhaustion. It is estimated that the original coal resource amounted to more than 3 trillion (3,000,000,000,000) tons.⁶ At the end of 1935 the total amount of coal produced in the United States from the time of earliest record was 21,818,992,000 tons or 17,689,070,000 tons of bituminous coal only.⁷ At the rate of recovery of about 69 percent, and production at the 1929 rate, the reserves⁸ of coal of all ranks might last for 2,890 years. Expressed in terms of equivalent tons of bituminous coal with a heat value of 13,000 B. t. u. s, and at the 1929 rate of production, the remaining life of the reserves of the mineral fuels at the end of 1935 would be as follows: All ranks of coal, 2,890 years; anthracite, 145 years; natural gas, 16 years; petroleum, 13 years; oil in oil shale, about 90 years;⁹ and the total of all fuels 2,130 years.¹⁰ The life for all fuels will be lower than that for coal alone at the 1929 rate because, after the exhaustion of natural gas and petroleum, coal will have to carry the burden of supplying energy.

Thus, motor fuel is a very important factor in the outlook. Motor fuel can be produced from bituminous coal but at a cost three times as great as at present,¹¹ hence the utilization of petroleum chiefly to meet the needs which cannot readily be supplied by coal seems urgent. Refineries produce from crude oil charged to stills a yield of about 44 percent gasoline, 39 percent fuel oils, 3 percent lubricants, and 14 percent other products (wax, coke, asphalt, and road oil, etc.).¹² Available processes (for example, the Houdrey process) can yield 80 percent gasoline and have wide latitude for producing larger proportions of other fractions to meet changing demands.

⁶ Report of the U. S. Coal Commission, vol. 3, p. 1851; Arno C. Fieldner, "Fuels of Today and Tomorrow," Proceedings of the American Society for Testing Materials (Philadelphia, 1937), vol. 1, pt 1.

⁷ U. S. Bureau of Mines, Minerals Yearbook, 1937, p. 814.

⁸ W. C. Trappnell and Ralph Hsley, The Bituminous Coal Industry With a Survey of Competing Fuels (Federal Emergency Relief Administration, Washington, December 1935), pp. 54-56.

⁹ National Resources Committee. Energy Resources and National Policy, p. 294.

¹⁰ Fieldner, op. cit. pp. 17-18; Rice, Fieldner and Tryon, op. cit. p. 6.

¹¹ Energy Resources and National Policy, p. 230.

¹² Energy Resources and National Policy, pp. 12-13; Minerals Yearbook, 1939, chapter on "Crude Petroleum and Petroleum Products."

The chief direct inroads into the market for coal are being made by the use of fuel oil for space heating and large stationary installations for power production, and the use of natural gas for heavy-duty industrial purposes—

uses that could be well served by coal.—

This utilization should be discouraged as much as possible by a program of education, but it appears, also, that additional steps need to be taken. * * * A tax on fuel oil, high enough to discourage further extension in consumption but * * * not too high to cause severe hardship to present consumers, would be a step toward rational utilization.¹³

An authoritative discussion of the problems connected with the mineral fuel reserves by Dr. Arno C. Fieldner is given below.¹⁴

Advances in fuel technology have contributed greatly to the conservation of coal, but economic conditions in mining have worked against completeness of recovery. The avoidable losses of bituminous coal in time of business activity have been placed at 150,000,000 tons per year. Coal left behind is lost forever, and the prevention of the present wastes is a matter of concern.

Unlike coal, estimates of the total national reserves of petroleum cannot be made. We can deal only with the proved reserves. In 1934 the United States Geological Survey estimated the oil in the ground recoverable by the current methods of production at 13,000,000,000 barrels, and the most recent estimate, that of January 1, 1937, by a committee of the American Petroleum Institute, puts the reserve at virtually the same figure. Thus in the last 3 years discovery of new fields has kept pace with production. We cannot forecast future rates of discovery, and opinions differ as to when a decline will begin. Regardless of whether it may begin within one or several decades, it is evident that our oil and gas reserves are small compared to coal.

The deposits of oil shale, largely in the Rocky Mountain States, are estimated to contain a potential supply of 92,000,000,000 barrels of crude oil, an amount sufficient to maintain the present annual rate of oil production for nearly 100 years.

The ultimate reserves of natural gas cannot be estimated. Fifty-five percent of the natural gas is produced in association with oil; therefore, oil exhaustion means the end of natural gas from these particular areas. Reliable estimates of reserves of individual gas fields are being made, but this work has not covered the country as a whole.

Conservative estimates of the proved reserves by individual authorities range from 30 to 40 trillion cubic feet. Other estimates are placed at considerably higher figures. At the present rate of 2 trillion cubic feet of production per year, this amount would last 15 to 20 years. Here also new sources will be discovered and the life of the fields, no doubt, will be extended greatly as growing social control will prohibit waste and low-grade use of this ideal form of our national fuel supply.

No one can predict with certainty what the future trends of consumption will be—what forces will bear upon and modify our present economy. The picture presented by Dr. Fieldner is reasonably within the limits of present knowledge, assuming that nothing will happen to interrupt the trends indicated by our present direction and rate of economic advancement.

Coal will continue to be the principal fuel used for the generation of public-utility and major industrial power. Technologic improvements and new hydro-electric power will tend to reduce the consumption of coal; on the other hand, an increasing demand for energy and a decreasing supply of cheap residual oil will increase the amount of coal consumed for power purposes. No material change is expected in either direction in the near future, but in 10 or 15 years the trend will favor increased consumption of coal.

¹³ Energy Resources and National Policy, p. 121. See also the New York Times, "Shortage of Fuels Feared by Expert," (June 29, 1937), p. 23, c. 8; "Oil Reserves in United States Put at 15 Years," (June 23, 1936), p. 24, c. 2; and "Nation 'Geologized' on Oil," (June 19, 1935), p. 36, c. 6.

¹⁴ The authors know no better authority than Dr. Arno C. Fieldner, Chief of the Technological Branch of the U. S. Bureau of Mines, with respect to the extent of mineral fuel reserves, their degree of exhaustion, and future probabilities. We are indebted for the figures and estimates used herein to "Fuels of Today and Tomorrow," a reprint from Proceedings of the American Society for Testing Materials (1937), vol. 37, pt. I.

No substitute has appeared for metallurgical coke. The coke-oven industry will expand and consume more coal in accordance with metallurgical needs, which are greatly affected by the supply of iron and steel scrap, but relatively few new installations for gas production can be expected in the near future on account of the availability of natural gas. Regulations prohibiting the waste of natural gas and the urge for additional markets will lead to the construction of more long-distance pipe lines from the producing fields to centers of consumption. This gas will find industrial and domestic use, and it will displace oil as well as coal. As natural gas approaches exhaustion, gas from coal will take its place.

The convenience and uniformity of automatic heating of homes with gas or oil will continue to attract more users, even at higher costs than those prevailing today. The insulation of houses has been improved greatly, and future homes will permit higher unit cost of fuel without increasing the total heating bill.

Stoker-fired domestic furnaces, now in their beginning, eventually will give automatic service at a lower cost than that for oil or gas. High-and-low-temperature cokes will supplement anthracite as solid smokeless fuel. Smokeless fuels and automatic furnaces will clear the atmosphere of smoke in the better residential districts.

On the whole, coal, because it is the cheapest fuel, will continue to contribute the major portion of the fuel used for house-heating and miscellaneous manufacturing, although further displacement by oil and natural gas probably will follow in the next few years.

In 1929, 88 percent of the railroad fuel was coal; since then Diesel locomotives have been adopted by several railroads for light-weight, high-speed passenger trains; and increase in Diesels for such service is expected, but no general change in freight haulage from steam to Diesel power is likely to take place. Further improvements in the over-all efficiency of the steam locomotive and a gradual increase of electrification will retain the use of coal for freight traffic throughout the age of oil and natural gas.

Marine transportation is energized by oil. Approximately three-fourths of the marine fuel used in 1936 was oil, and 40 percent of this oil was used in Diesel engines. This trend will continue. The convenience and economy of Diesel-engine drive for ships and boats are such that its use will continue even after declining production of petroleum requires the production of Diesel fuel from shale or coal.

Finally, I come to the most interesting question of all, our motor-fuel supply. Snider and Brooks have predicted the probability of a considerable shortage of domestic petroleum by 1945;¹⁵ and they state that, "The prospect is apparently for a continuation or only a slight modification of the present situation until a shortage of domestic petroleum materializes. Domestic petroleum will then gradually be replaced by imports and substitutes in relative proportions and at price schedules not now predictable beyond a practical certainty that the prices will be appreciably higher than in the present ones."

From the very beginning of the automobile industry, recurring threats of shortage of gasoline were met—in the field, by finding new pools and improving production technique, and in the refinery, by increasing yields and making a more efficient product. The end has not been reached. We are just beginning to use scientific methods in extracting oil from the sands, and polymerization and hydrogenation eventually will furnish the means for complete conversion of volatile liquids and heavy petroleum to gasoline.

Although such complete conversion is possible, recent development of the Diesel engine into a light mobile motor is likely to change this trend. The sales of Diesel engines in terms of rated horse-power increased from 750,000 in 1934 to 1,830,000 in 1936. Sixty-four percent of the horse-power sold in 1936 was applied to portable or automotive equipment and consisted of units of less than 100 horse-power. Due to the higher thermal efficiency of the Diesel engine and to the fact that it can use the heavier fractions now employed as cracking stock for gasoline, approximately three times the mileage should be obtained from a gallon of crude oil utilized for Diesel fuel than is obtained by conversion to gasoline.

Continuation of present trends toward Diesel power for other purposes also will increase the demand for the heavier oils, resulting in a material shift in future refinery operations. Obviously, economic considerations favor the development of that combination of motor and fuel which converts the greatest portion of the energy in the original petroleum into useful work from the finished fuel.

¹⁵ L. C. Snider and B. T. Brooks, "Probable Petroleum Shortage in the United States and Methods for Its Alleviation," *Bulletin, American Association of Petroleum Geologists* (1936), vol. 20, p. 49.

These improvements, and others yet to come, will add their bit to extending our petroleum reserves. As demand exceeds supply, and prices rise, supplemental fuels of similar characteristics from other sources will come in. These sources are coal, oil shale, and vegetable materials.

Increasing demand for Diesel oil and cracking stock will foster coal carbonization, with maximum recovery of liquid by-products. Then as needs increase, hydrogenation of low-temperature tar, shale oil, and coal itself and the synthesis of hydrocarbons from water, gas, and alcohol from fermentation processes will take over as much of the load as may be required.

It is possible also that producer gas from active forms of solid fuel, such as low-temperature coke and lignite char, will find a place on heavy vehicles operating on steady service, such as trucks and busses. Gas-producer-operated vehicles are being tried in Europe at present; while lacking in convenience and flexibility, the fuel cost is very low.

Reliable information on the cost of making gasoline from coal in British and German plants is not available, but it is believed that it is three or four times the present cost of producing gasoline from petroleum in the United States. These costs will be reduced by further research, but no other liquid motor fuel, whether it be from coal, oil shale, or vegetable matter, can hope to be as cheap as our present petroleum fuels.

* * * * *

Robinson¹⁶ estimates that 10 to 12 million dollars is spent annually on research and development in the refining of petroleum. Even more should be expended on the preparation and direct utilization of coal. Marvelous strides have been made in power generation in central stations. Little has been accomplished in commercial utilization and domestic heating. Low cost is an important advantage of coal. Research should find a way to obtain heat automatically from coal as effectively as from gas or petroleum. Even today, Diesel engines burning coal dust give some promise of eventual use. Problems due to the ash-forming materials in coal are difficult but not impossible to solve. Such engines, while not suitable for automobiles, would be highly efficient in the generation of power in small stationary plants.

Fortunately, the coal industry is beginning to appreciate the value of research, and a comprehensive program may be expected. It should result in a more rational utilization of the national fuel reserves. Our gas, oil, and coal have energized an industrial civilization on a magnificent scale. Scientists, engineers, and an enterprising business organization have modified these materials to meet our every need; and finally, we are awakening to the need of conserving these resources wisely so that the generations of tomorrow will have better fuels than we of today. Future scientists may unlock undreamed of powers, but we as engineers should plan on the basis of the resources known today.

This extensive quotation from Dr. Fieldner is important because of his prediction that coal will carry the major load after the exhaustion of gas, oil, and oil shale. Any well-conceived policy of conservation must anticipate this burden upon coal, and the Government should encourage and extend present research looking to less waste in mining and greater efficiency in combustion. Whether this should be done under a national program supported by industry and Government cooperatively, or whether all present research efforts should be synchronized under a central direction, might well be given consideration. If, as Dr. Fieldner estimates, the oil and gas reserves, with such supplements as are now in view, will possibly reach the point of decline within 50 to 100 years, organized research might well develop measures that will materially affect the life of the reserves of all mineral fuels, as well as the cost of using them.

¹⁶ E. DeGolyer, Noel Robinson, Robert Hardwicke, and Myron W. Watkins, "Organization of Production, Refining and Distribution of Petroleum and Petroleum Products," Third World Power Conference, Washington, D. C. (1936), sec. II, Paper 5, p. 10.

THE CONSERVATION MOVEMENT

The conservation movement had its inception in protests against the rapid depletion of the Nation's forests. Memorials presented in 1873 and 1890 by the American Association for the Advancement of Science led to the movement for the establishment of a Forestry Bureau in the Department of Agriculture, and for the first National Reserve in 1891. In 1888 an irrigation division was established in the Geological Survey, and the Secretary of the Interior was given authority to withdraw from private entry such reservoir sites and other areas which would be necessary for future irrigation. Nevertheless there was no national movement for conservation of natural resources until after 1900.¹⁷

CONSERVATION MEASURES SO FAR PROVIDED

The Federal Government, by the establishment of a Forestry Bureau in the Department of Agriculture and the first National Forest Reserve in 1891, took its first step toward a policy for the conservation of natural resources. There was, however, no definite national movement for conservation of all natural resources until the present century. President Theodore Roosevelt in 1907 appointed the Inland Waterways Commission, which pointed out the inter-relationship of natural resources in the whole problem of conservation. This conference met in May 1908 and included high officials of all branches of the Federal Government, 34 governors and representatives of the other States and Territories, delegates from 68 national societies, and others.¹⁸ The result of this conference was a declaration of principles recommending laws to prevent waste in the mining and extraction of coal, oil, natural gas, and other minerals; promote their wise conservation; and increase safety in the mines. Further conferences were suggested. Following these conferences, 41 State conservation commissions, and 51 similar agencies representing national organizations, were created. The President appointed a National Conservation Commission, with 49 members, organized in four sections: Forests, waters, oils, and minerals. This Commission was without funds, but at its instigation an inventory of natural resources was undertaken. In February 1909, President Roosevelt called a North American Conservation Conference which went on record in a declaration of broad principles. The National Conservation Commission came to an end when Congress refused to appropriate funds and forbade all Government bureaus to do any work for any agency appointed by the President.¹⁹

Prior to this attempt toward a policy of conservation for all natural resources, Congress had in 1873 displayed interest in coal conservation when it passed an act providing for the separation of public lands containing coal from other public lands, and for their sale as coal-bearing lands.²⁰ Before this time public lands had been sold for

¹⁷ Loomis Havemeyer, *Conservation of Our National Resources* (Mcgrillan Co., New York, 1930), p. 5.

¹⁸ *Ibid.* Ch. I, and Appendix I.

¹⁹ Loomis Havemeyer, *Conservation of Our National Resources* (Mcgrillan Co., New York, 1930), Ch. I, and Appendix I.

²⁰ 17 Stat. 607 (Mar. 3, 1873).

the surface without consideration for underlying coal. During Theodore Roosevelt's administration, large areas of coal-bearing lands were withdrawn from private entry for the purpose of classification. Protests against this withdrawal policy led to acts which permitted surface entry on such withdrawn or classified lands. In 1914, an act²¹ provided for the development of coal fields in Alaska under Federal leases. This was followed by the Leasing Act of 1920.²² This 1920 act, amended in 1935, opened coal, oil, gas, phosphate, and sodium deposits in the public domain to prospecting and leasing. The Secretary of Interior was authorized to grant permits for prospecting, and without requiring the payment of royalties, to license or issue permits for the extraction of coal (1) by an individual for his own domestic use without sale, (2) by a municipality for sale to its residents for domestic or household use. Other corporate lessees must pay a minimum royalty of five cents a net ton and an annual rental of not less than one dollar per acre after the fifth year. Of royalties paid on production after February 25, 1920, 52½ percent go to the reclamation fund; 37½ percent to the State in which the lands or deposits leased are located; and 10 percent to the Treasury of the United States.²³

The above legislation for the leasing of coal land applies only to deposits within the public domain. Nearly all of the known coal fields in this country are still privately owned.

²¹ 38 Stat. 741 (Oct. 20, 1914).

²² 41 Stat. 437 (Feb. 25, 1920).

²³ Reclamation Act, 32 Stat. 388 (June 17, 1902).

APPENDIX C

UNITED STATES DEPARTMENT OF THE INTERIOR BITUMINOUS COAL DIVISION Washington, D. C.

IN THE MATTER OF THE ESTABLISHMENT OF MINIMUM PRICES AND MARKETING RULES AND REGULATIONS. GENERAL DOCKET NO. 15.

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER OF THE DIRECTOR OF THE BITUMINOUS COAL DIVISION ESTABLISHING EFFECTIVE MINIMUM PRICES AND MARKETING RULES AND REGULATIONS UNDER THE BITUMINOUS COAL ACT OF 1937

This is a proceeding instituted by the National Bituminous Coal Commission and continued by its successor, the Bituminous Coal Division of the United States Department of the Interior, pursuant to the Bituminous Coal Act of 1937, to establish effective minimum prices and marketing rules for bituminous coal of producers who have accepted membership in the Bituminous Coal Code, promulgated by the Commission under the authority of said Act.¹ By Order dated May 25, 1938, the Commission instituted this proceeding for the purposes of carrying out the provisions of subsections (a) and (b) of Section 4, Part II, of the Act,² designating the proceeding as General Docket No. 15.

The matter is now before the Director upon exceptions to the Report of the three Examiners who conducted the hearing in that phase of this proceeding which related to minimum prices as coordinated for Districts 1-20, inclusive, 22 and 23,³ and upon request for review of the findings and conclusions of the Commission on prior phases of the matters included in General Docket No. 15.

A detailed account of the procedure followed in this proceeding is set forth below. A brief outline may be appropriate here by way of general introduction.

The price-fixing process contemplated by the Act has three aspects of phases: the determination of the costs of each minimum price area; the setting, as a basis for coordination, of minimum prices for each district, classifying the various kinds, qualities and sizes of the coal

¹ The National Bituminous Coal Commission will hereinafter be referred to as the "Commission"; the Bituminous Coal Division of the United States Department of the Interior as the "Division"; the Director of the Division as the "Director"; the Bituminous Coal Act of 1937 as the "Act"; the Bituminous Coal Code as the "Code"; and the producers who accepted membership in the Code as "Code Members".

² Hereinafter referred to as "Section 4 II (a) and (b) of the Act."

³ The Act marks out the boundaries of twenty-three districts, consolidated into ten minimum price areas. District 21, and Minimum Price Area 8 consist of all coal-producing counties in North Dakota and South Dakota. After an investigation pursuant to its Order No. 35, the Commission determined, on June 28, 1939, that the coal produced in those counties was not bituminous within Section 17 of the Act. Hereafter "Districts 1-23" and "Minimum Price Areas 1-10" will, for convenience, be understood to exclude District 21 and Minimum Price Area 8.

produced within the district; and the fixing of prices coordinated in common consuming market areas.

Upon the basis of statistical data provided by the Commission, the district boards determined the weighted average cost of production of each district. Hearings were scheduled thereon. The Commission announced that individual cost reports would be made available, but was temporarily enjoined from making such disclosure. In June and July, 1938, hearings were held, and in July and August, 1938, the Commission made determinations of the cost of production of each minimum price area. After the court injunction was lifted, on January 31, 1939, hearings were reopened in February, March, and April, 1939. The Commission made final cost determinations in May and June, 1939. The transcript of the cost hearings consists of about 5,000 pages of testimony and 500 exhibits.

The Commission submitted the 1938 cost determinations to the district boards which, under Section 4 II (a) of the Act, proposed prices and price classifications of the coals and sizes produced in each district. After hearings held during September–December, 1938, the Commission, in orders issued in December, 1938, and January and February, 1939, approved proposed minimum prices and price classifications to serve as the basis for coordination under Section 4–II (b). The transcript of the record of the 4–II (a) price hearings consists of about 8,000 pages of testimony and 600 exhibits.

The process of coordinating the 4–II (a) prices in common consuming market areas was begun by the district boards pursuant to orders of the Commission issued when the 4–II (a) prices were announced. A few district boards completed coordination. The remainder reported their inability to effectuate coordination, and the Commission, pursuant to orders issued during March and April 1939, proceeded with the coordination process. Upon completion of the “coordinated price schedules,” notice of hearing before three designated Examiners was given by the Commission in May and June 1939. The hearing opened on May 19, 1939, was temporarily adjourned on June 1, 1939, was resumed on July 24, 1939, and was adjourned on January 20, 1940. Oral argument was heard in February 1940.

Appearances were entered at the hearing in behalf of each of the twenty-two district boards and the Consumers’ Counsel Division. More than 300 producers and consumers and other interested persons were represented at the hearing, and several hundred more filed protests. The proceedings before the Examiners contain over 26,000 pages of testimony and oral argument, about 2,000 exhibits, about 700 written protests, and 112 briefs. The Examiners filed part of their report on March 21, 1940, and the remainder on April 13, 1940.

Pursuant to Orders dated July 19, 1939, April 23, 1940, and May 3, 1940, certain parties filed with me exceptions to the proposed findings of fact and conclusions and recommendations of the Examiners, requests for review of the findings and conclusions of the Commission upon other phases of the matters included in General Docket No. 15, supporting briefs, and requests for oral argument before me. Exceptions and briefs were filed on behalf of 581 parties, and requests for review of the findings and conclusions of the Commission were filed on behalf of 48 parties. Oral arguments on behalf of at least 289 parties were heard by me during the period of May 27 to June 6, 1940.

Reply briefs were filed on behalf of 105 parties. Subsequent to the filing of the Examiners' Report, several parties have filed miscellaneous motions and other moving papers relating to the proceedings before me.

PART I. GENERAL FINDINGS OF FACT

A. GENERAL CONSIDERATIONS IN THE ESTABLISHMENT OF MINIMUM PRICES

* * * * *

I. CHARACTERISTICS OF THE BITUMINOUS COAL INDUSTRY

The problems arising in the fixing of minimum prices for bituminous coal must be viewed in the setting of the bituminous coal industry and the nature of this industry must be appreciated.

* * * * *

1. *Excess of Productive Capacity Over Demand.*

The bituminous coal industry has not always or continually been in need of minimum price regulation. During the first World War, it was prosperous, and experienced governmental regulation in the form of maximum prices. It experienced some post-war windfalls. Thereafter, it became again a great depressed industry. The circumstances and conditions of its depression is a complicated story with many aspects to it. It can be simply stated, however, that the most significant fundamental condition of the bituminous coal industry which has led to the minimum price legislation of the last decade is the fact that the industry's productive capacity has been far in excess of the demand for bituminous coal. This was true even prior to 1914, and was accentuated by the expansion of the productive capacity of the coal industry during the war. The factor of decreasing demand is attributable in large measure to the increased and increasing efficiency in the use of coal and also in part to the availability of competitive forms of energy.

The excess productive capacity, coupled with constant or diminishing demand, sent prices down. For various reasons stated below producers would sell coal below cost. However, such price declines did not stimulate proportionate increases in demand. As one of many raw materials, coal does not bulk large in most manufacturing costs. Although demand is variable, its substantial variations are not proportionate to changes in price, but are influenced primarily by general business activity.

2. *Decline of Prices Below Average Cost.*

Under the conditions described above, producers cut prices in order to dispose of their coals. Indeed, for long periods during the past two decades, the industry realized less than its average cost of production. And the bituminous coal industry is unlike some industries, where production tends to adjust itself with some flexibility to demand.

(a) *Expense of temporary shut-down.*—Coal producers commonly continue to produce coal, though realizing less than the cost of production, because of the high cost of temporarily shutting down a mine—due to taxes and possibly royalties, and to the expensiveness of

physical repairs in reopening a mine. Production below cost, therefore, is the condition of many producers who continue as long as they have the resources to carry on in some fashion and as long as they can continue to hope that the condition of the coal industry, or their individual fortunes, may be ameliorated. In appraising the force of this aspiration, we should not overlook the homely truths that man awakens slowly to adversity and that hope springs eternal in the human breast. Moreover, persons trained in one industry cannot lightly abandon it and take up another.

(b) *"Additional sales"*.—Moreover, overhead costs in the operation of a mine are relatively constant and stay about the same regardless of how much coal is produced. Accordingly, each producer places emphasis upon increasing production and will try to dispose of additional amounts of coal so long as he can get more than the actual out-of-pocket costs of producing this additional coal even if he cannot obtain the total cost of production of such coal. He cuts prices to try to keep his mine running at or near capacity. He cannot afford to let any particular order go by so long as it nets more than its direct cost, even though it may altogether ignore the claims of overhead. In the aggregate the producer wants to cover total cost; in the particular instance he contents himself with out-of-pocket plus. Since he must get and hold individual customers, the aggregate gets to be the sum of the instances, with the result that there is an aggregate loss and eating away of investment.

(c) *Distress tonnage*.—The cutting of prices below costs was induced in part by competitive factors peculiar to the coal industry. These factors are discussed below. Frequently there is a demand for particular sizes of coal. The producer is unable to produce one size without at the same time producing other sizes which are joint products, or co-products, of the first size. Thus, a cold winter and a high price for the large sizes sold to domestic consumers brings out not only those sizes but also, at the same time, the smaller, industrial sizes, although there is no important demand for such sizes.

* * * * *

The other sizes for which there is no demand cannot be discarded like by-products in the meat-packing industry. They clog the mines, and the collieries. They cannot be stored; it is uneconomical to store coal, and mines generally do not maintain storage facilities. They cause congestion at the tracks and tie up the capacity of the mine, thereby increasing the cost of production. Moreover, under railroad rules occasionally imposed (100% rule) the producer can't receive more cars before moving the cars with the joint product. In the past producers consigned these sizes to some consuming territory and faced mounting demurrage charges threatening to wipe out any possible realization from the unwanted sizes. The producer slashes price to get rid of this "distress coal", of which there is a substantial quantity.

Thus, a rising demand and a rising price may act not as a stabilizing control of the coal market as a whole, but only of one part of the market. It may act as a disturbing force in another part of the market.

3. *Factors Affecting Prices and Price Differences.*

* * * * *

Bituminous coal is a complex organic chemical substance. Its value to a consumer will depend upon factors of quality, size, and use, all of which overlap. It is a variable rather than a standardized article, and its range of utilities depends upon a technology of consumption, an art still being developed. There are many different kinds of coal, varying from each other in intrinsic chemical and physical characteristics, produced in many sizes, and used by many different classes of consumers with varying degrees of consideration for these characteristics.

(a) *Desirability (quality) of different coals.*—Obviously, one of the important matters affecting the price, or price relationship, of a coal is its desirability to the consumers. * * * Different consumers look for different things in a coal, depending in part upon the use to which it will be put, the performance of the coal, and in part upon intangibles such as custom. But in general the desirability of a coal will depend upon its chemical properties, its physical properties, and its reputation.

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(b) *Size differences.*—To some extent, the price paid for coal has depended upon the size thereof, the larger coals generally being of somewhat more value than the smaller, although changes in domestic burning equipment have been narrowing the range between them. Certain sizes may have a greater value than others for particular uses and a lower value for other uses. The type of burning equipment may determine the relative utility of various sizes to the consumer. The same coal may have different "quality" in different sizes—e. g. the slack sizes may contain more ash than the egg sizes, etc. Price differences between sizes are not always a reflection of real variation in actual utility, but are sometimes dependent upon custom. Industrial consumers may establish price differentials in a given market on the basis of variations in the utility of the different sizes. Domestic consumers may be willing to pay larger sums for the larger sizes, because of the ease (rather than the economic efficiency) of tending the fire, because of impressions gained from advertising, salesmanship, etc., and sometimes because of custom.

(c) *Differences between types of consumers; use differences.*—The bituminous coal industry has long known the condition under which the price of coal, and of different coals relative to each other, has varied with different types of consumers. Under open competition a pervasive characteristic of the industry is that of varying types of differentiations between consumers.

To some extent coals may vary in value from plant to plant, depending upon the use to which they are put, the type of burning equipment, type of heating or steam load, etc. * * *

Factors affecting the value to consumers of coals for steam and heating use have been considered. In selecting coals for use in the manufacture of coke, by-products, water gas and retort gas, quality requirements are extremely rigid. * * *

Railroads purchase coal upon the basis of considerations different from those guiding ordinary commercial consumers. The mobile locomotive boiler is relatively inefficient due to the loss of unburned coal discharged through the stack. Low-volatile coals, more valuable than high-volatile coals in the commercial markets, are not as satisfactory for locomotive fuel use. The large lump sizes, more valuable in the general commercial market, merely have to be crushed before consumption in the locomotive boiler. Other sizes differ comparatively little in their value to railroads. This factor ties in with the willingness of the railroads to accept substitutions by the producers of surplus and excess sizes, permitting producers to balance demand and retaining sources of traffic for the railroads. Moreover, the entire pattern of railroad purchases is interwoven with reciprocal relationships, and the desire to obtain a stabilized and continuous traffic in coal freight. This factor, which is of especial importance as to sales by on-line mines, represents a compromise with use value in an engineering sense. Its significance is great.

As will be seen below, transportation charges have a considerable effect upon the pricing of commercial coals. So far as railroads are concerned, it is of comparatively little importance in sales by on-line mines (mines on the lines of the railroads) since railroads do not reflect haul charges except in operating cost. And railroads pay specially agreed divisions, rather than commercial freight rates, for any transportation prior to delivery of the coal.

Price distinctions have been taken according to whether the coal is destined for domestic or industrial consumers. As mentioned above, the larger sizes have a better appearance which is desirable to the domestic consumer out of proportion to the differences in heat value which largely guide the purchases of the industrial consumer. Furthermore, producers respond in terms of price to the advantages of obtaining the large-quantity orders placed by the industrial concerns, and some large consumers, by taking the larger sizes in seasons when they clog the market, also help producers to balance production and demand.

(d) *Seasonal demand.*—The factor of seasonal demand and its effect upon prices and price relationships has been sufficiently mentioned for present purposes. In some instances, an attempt to offset the effect of this factor has taken the form of granting seasonal discounts on some domestic coals. The larger, so-called domestic sizes, particularly in the higher grade coals, are in greater demand during winter months. In order to help stabilize year-round production, some producers, especially of firm coals suitable for storing, have allowed seasonal discounts on domestic purchases during the summer months. This practice has by no means characterized all districts, all producers, or all domestic coals.

(e) *Competitive forms of fuel and energy.*—The foregoing factors supply part of the background of bituminous coal markets. Another important consideration in these markets is that of competition.

One of the elements of competition is the competition of different forms of energy and heat—electric power, gas, anthracite coal, oil, etc. The presence of these competitive forms of energy tends to put a ceiling on, and to limit the flexibility of the prices for bituminous coal. * * *

(f) *Factors conditioning movement of particular coals into markets.*—The Commission made a survey of the movement of coal during 1937, which was a representative year for the study of the industry under free competition. This survey showed all the salient facts about the movements of bituminous coal during 1937—the producers thereof, the market distribution, the tonnages shipped, etc. As is clear from elementary economic theory, and as is shown by the survey, in general three economic factors influence the movement of coals and their competition in markets—transportation charges; the qualities of the coals; production costs.

(i) *Transportation charges:* Transportation charges have a tremendous effect upon the ability of coals to reach out into markets. The importance of freight rates as a determining factor in coal shipments is easily understood in the light of the fact that freight rates often account for a larger part of the delivered price of coal than the producer's return.

A field with a great freight rate advantage will normally have the dominant position in a market. * * * Of course, this advantage may be offset somewhat by different advantages, such as superior quality, possessed by the remote district. Even then, the freight rate advantage will give the field at least a competitive position in its home market. * * * Even where the coal dominates the market because of a freight rate advantage, the possibility of competition from other fields always remains as a factor operating, in addition to competitive forms of energy and competition between the home producers themselves, as a brake upon price increases in such a market. Where freight rates from two producing fields to a market are more equal, and the coals can otherwise compete, the market is characterized by active competition between the two coals, which primarily takes the form of vigorous price competition.

(ii) *Quality:* Producers of high quality coals are not only generally able to obtain more than the producers of low quality coal in competitive markets, but they also are able to stretch out their competitive position into more distant markets. * * * It is generally not worth the consumers' while to pay high freight charges upon low-grade coals. Where there are substantial increases in level of prices, lower grade coals must increase the amount of the price differential under higher-grade coals in order to maintain their relative price attractiveness. Moreover, certain consumers, such as domestic consumers, desire higher quality coals even if they have to pay a considerably higher price for them.

(iii) *Production costs:* The bituminous coal industry, like all other industries, has high-cost and low-cost producers, as well as those approximating the average. These are not confined to any one producing field. The various districts differ markedly in their weighted average production cost, as is clear from the weighted average cost determinations for 1936, adjusted to April 1–December 31, 1937. * * *

Production costs, like freight rates, have had a substantial influence upon the competitive position of producers. Where districts producing coals of equivalent quality have similar transportation charges to a market, the lower-cost district will generally enjoy a competitive advantage reflected in wider distribution, with the higher-cost district improving its competitive position in markets to which it has favorable

freight rates. * * * But of course a high-cost district may cut its prices to specific destinations or even generally. It may thereby maintain its production and distribution, even over a period of years, and even though its realization is below its cost of production.

Production costs have had an appreciable but not conclusive effect upon coal movements under open competition. Neither the distribution nor the prices of coals have merely builded upon a cost pattern. Many factors operating upon producers led to sales below costs. Generally, at least since shortly after the war, the industry failed to return its average costs. But although actual prices in the markets turned largely upon matters other than production cost, production costs were a factor which operated, in a general way, to influence the markets which producers tried to get or to hold.

(g) *Transportation charges and absorptions of such charges by the producers.* The factor of transportation charges, mentioned above is extremely complex. Coal is transported under rail freight rates which are (1) precise, from point of origin to point of destination, (2) published, and (3) kept under surveillance by public agencies, primarily, of course, the Interstate Commerce Commission. Coal is also transported by truck and by water, where these three characteristics are either not present or are not present to the same degree. Whatever the method of transportation, however, the freight rate picture is not a simple pattern. Even as to any single form of transportation such as railroads, the rates do not present a mathematical equivalence with distance, nor are they built upon any single theory. Rather, they are molded *ad hoc* to fit the complexities of complex industrial realities. And as they are complicated by the facts of the industry, so they, in turn, complicate the business and pricing practices of the industry.

* * * * *

(h) *The characteristics of particular markets and price discriminations and competition therein.*—The matters described above outline certain general factors and trends affecting prices in the bituminous coal industry. The actual marketing of bituminous coal, however, is far from a mechanical application of blueprint principles. It is rather a business effort which turns on an unpredictable collection of circumstances making up a particular price situation. Only a part of the total situation can be grasped by the simple statements that the industry is disorganized; that consumers do not buy coal on purely logical principles; and that there is no price pattern to which producers have adhered.

The nature of the bituminous coal markets is in part responsible. Coal is not priced or marketed like wheat, which is first produced and then sold in an auction process. In wheat there is a relatively central market, which moves sympathetically with the world market. The number of both buyers and sellers is so large that no one of them may, by bringing individual powers or influence into play, have an appreciable effect on the price, which is a national or world price. On the other hand, coal does not move freely, like wheat, to some great center for national distribution. In large measure coal is sold before it is produced. It is coal, in-the-marking, inchoate coal, that goes to market. However, such coal as is produced prior to sale has an unusually emphatic effect upon the market price. There is no objective picture

of the "market" or the prices fetched on the market at the time when the bargain is struck. The market means concrete consumers or retail storage yards with whom the producer, or sales agent or distributor, must make personal contact, through salesmen and advertising, etc., at least in the first instance.

The status of the coal market is uncertain. Theoretically, at least, the seller starts off in the market with a price in mind apart from a vague desire to get the best price he can, which will cover total costs and include a profit. Practically, the process of quotation includes a thorough-going process of meeting competition. The seller cannot adopt the policy of quoting prices so high that another producer, in the same or a different field, can undercut him. He must consider whether or not the competitor's price is as represented by the consumer, or by the salesman reporting back to the home office. He must consider the desirability to the consumer of his coal and his competitor's, in terms of use and equipment. And he must consider many intangible factors such as reciprocal arrangements, business alliances, personalities, etc.

He must consider the relative competitive position of himself and the competitor. It makes a difference whether the competitor's price is on a particular distress shipment of a surplus size, represents an attempt to make some "additional sales" for more than out-of-pocket cost, or represents a price being set for the main bulk of tonnage. The producer's own eagerness to make the sale may depend on whether the reduced price comes close to actual unit production cost or barely clears out-of-pocket cost, or whether there are other sales prospects in more favorable markets, say, close to home where realization is higher.

The seller's price and consideration of the above factors may be for the purpose not of meeting competition, but of making competition and attempting to reach out into new markets, although no fine distinction can be invariably drawn in the hurly-burly of making sales. The producer must gauge the probable resiliency and tactics of the producers he is attempting to displace, as well as of the producers attempting to displace him.

Advertised prices for coals of a particular reputation may tend to reduce such price-cutting, or at least to stabilize prices in the first instance, but it is a matter of everyday knowledge that such prices are frequently ignored. In addition to the differentiations between consumers in a broad sense, such as occur upon freight rate absorptions as discussed above, there are more particularized discriminations. Obviously a producer who cuts prices below production cost in order to extend sales in a particular market will not desire similarly to cut his prices on the great bulk of his sales and wipe out realization. Yet his effort to cut may make producer after producer match offers and have a depressing effect upon a total tonnage exceeding the amount he threatens to, or physically can, supply upon the reduced price. Price-cutting to extend markets, or price quotation to hold on to outlets, and discriminations between consumers, are all affected by the character of the consumers and the relationships between the consumers and the producers. These relationships may reflect normal business considerations, such as the character of the producer's service in the past, the producer's and the consumer's position on credit

terms, or the relationships may turn, as stated above, on reciprocal factors, personality factors, etc.

A low price on a particular piece of business may be influenced by an unspoken commitment to give more business to the producer. Low prices during a particular period may be influenced by the fact, or even rumor, that the consumer is contemplating a long-term, or huge-supply, contract.

These factors could be considered at greater length. It is enough to observe the variety of them that may affect any sale or price. It is perhaps, excessive understatement to conclude that bituminous coal markets are hardly pure and perfect price markets, and that the prices for bituminous coal are not derived from any one or several factors.

It must be noted also that this highly complex network is interwoven with our business, industrial and transportation economy. It cannot be remade overnight without grave danger to our entire economy—to the railroads which purchase more than 20 percent of the total annual production of bituminous coal and receive about 17 percent of their gross receipts from the bituminous coal industry; to other transportation facilities; to the great industries that are built upon suitable coal supplies; and to the thousands of coal producers, large and small, and their workers. Three things are therefore clear: That as Congress directed, the task of fixing minimum prices for the purpose of returning generally the cost of production, must be accomplished with as little disturbance to the existing situation as is possible with fairness and justice; that principles which might in theory bring about a better order, but which will disrupt existing ways must be cautiously viewed; and that no single theory or selection of factors can be mechanically applied if the purpose of Congress is to be fulfilled and if the intricate network of the industry (and of other related industries) is not to be broken with unforeseeable consequences.

II. APPLICATION OF THE STANDARDS OF THE ACT

1. Establishment of General Price Structure, Subject to Adjustments.

The complexity of the bituminous coal industry entails a corresponding complexity of regulation, particularly since the Act prescribes that the minimum prices shall preserve existing fair competitive opportunities. Unlike other price or rate proceedings conducted by administrative agencies, which relate to particular companies or particular regions, the coal minimum-price proceeding involves the entire country, and entails keeping in balance various considerations that operate in myriad ways throughout the country; the prices and qualities of the different coals in different sizes, competing in numerous geographical markets, and the attitudes of consumers toward those coals; the transportation methods involved in the movement of the coal from the mines to the markets, including rail, truck, and water-shipments, and the complicated freight rate structure governing these movements; the competition of different forms of energy in the various markets, etc.

The minimum prices are not set for an industry already governed by prices, so that intensive scrutiny can be given to a particular portion of the price structure which may be assailed or which is seen to be

working badly. Indeed, far from being price-regulated, the bituminous coal industry is a relatively chaotic, fluctuating industry, which is characterized not by settled, standard conditions, but at most by general trends, including diverse and even contradictory specific trends. Relatively sound estimates and judgments, rather than indisputable factual determinations is the contribution of the experts and the informed business men to the solution of the problems—problems as to the intrinsic values of different coals and different sizes; their market prices and price relationships; the volume and character of each of the competitive forces operating in a market, etc.

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* * * testified as to various matters, and many of these were experienced as to some phase of the coal industry, on the producing, selling, or purchasing end, and offered valuable and useful information. Moreover, the elaborate procedure followed has produced at each stage of the three-year process, appraisals and judgments by qualified persons which are of great assistance in evaluating the evidence and analyzing the probable effect of alternative decisions. There has been, in addition, the benefit of experience under similar price fixing plans which were put into effect under the N. R. A., and the benefit of consideration of the problems under the predecessor of this Act (the 1935 Act), and the price regulation under this Act for a few months in 1937–1938.

2. General Analysis of the Standards.

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(a) *Relationship of sections 4-II (a) and 4-II (b).*— * * *

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(b) *The standards of sections 4-II (a) and 4-II (b).*— Giving appropriate consideration to both Section 4-II (a) and Section 4-II (b), it is apparent that the statute provides that the effective minimum prices shall conform, in general, to the following standards:

- (i) The minimum prices are to be f. o. b. transportation facilities at the mine for the various kinds, qualities, and sizes of coal produced in the several districts, and shall be coordinated in common consuming market areas upon a fair competitive basis.
- (ii) The minimum prices shall be just and equitable and not unduly prejudicial or preferential as between and among districts.
- (iii) The minimum prices shall reflect, as nearly as possible, the relative market values, at points of delivery in each common consuming market area, of the various kinds, qualities, and sizes of coal produced in the various districts, taking into account values as to uses, seasonal demand, transportation methods and charges and their effect upon a reasonable opportunity to compete on a fair basis, and the competitive relationships between coal and other forms of fuel and energy.
- (iv) The minimum prices shall have due regard to the interests of the consuming public, and shall not permit dumping.

- (v) The minimum prices shall preserve as nearly as may be existing fair competitive opportunities.
- (vi) The minimum prices shall conform to realization standards, to the ultimate end that the return per net ton for each minimum price area shall approximate the weighted average cost per net ton of that minimum price area.

(c) *Relationship of the standards.*—All of the standards set out above must, of course, be applied; and they must be construed as a whole. Many of them quite obviously overlap; all of them interlock. For practical purposes and to simplify consideration of their meaning, the standards may be divided into three groups.

First, the standards relating to realization, which serve the ultimate end that the minimum prices yield a return per net ton approximating the weighted average cost per ton of each minimum price area. The costs for the various minimum price areas were determined by the Commission and have been reviewed and approved by the Director, as set forth elsewhere in these findings. The realization from the minimum prices determined by the Director is discussed elsewhere in these findings.

Second, the standards requiring that the minimum prices must be coordinated in common consuming market areas upon a fair competitive basis, must be fair and equitable as among producers and districts, must not permit dumping, must have due regard for the interests of the consuming public, must preserve, as nearly as may be, existing fair competitive opportunities, and must reflect, as nearly as possible, the relative market value of the various kinds, qualities and sizes of coal. These may be characterized as the general and basic standards of fairness and reasonableness against which the minimum prices must be judged.

Third, the requirement that there be taken into account values as to uses; seasonal demand; transportation methods and charges "and their effect upon a reasonable opportunity to compete on a fair basis"; and competitive relationships between coal and other forms of fuel and energy. All of these are specific factors which Congress set out, without limitation, as matters to be weighed in fixing minimum prices conforming to the general standards.

A description of the manner in which the standards were considered and taken into account is contained in the findings of the Examiners and will be further discussed below. The mechanics of the interlocking of standards may be illustrated, for example, with reference to the coordination of competitive all-rail coals moving into a common consuming market area. Initially, as the Examiners explained, there was selected a representative destination, reflecting the competitive factors operating in the market area and typical in general of the competitive situation in the market area. A "base" coal was selected, one moving in large tonnages and widely distributed and well-known, and base coals were selected for the competing districts. The process is essentially one of selecting f. o. b. mine prices for each coal which, when added to the transportation charges applicable to that coal, will yield such delivered prices that the various base coals were properly related, size for size and class for class, reflecting their fair existing competitive opportunities, in the particular market. After the relation of the base coals, the other coals for each district are then tied in with prices. In

this way the prices are set f. o. b. the mines, and by (1) taking into account transportation charges they (2) enable the competitive coals to deliver at such prices as will permit them to continue their existing fair competition. The results so obtained must be weighed and modified as necessary to take proper account of competition from competitive fuels, special uses, the interests of the consuming public, etc.

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3. *Basic General Standards.*

This section and those following consider to some extent the general principles implicit in the Division's method of applying the standards of the Act. * * *

(a) *The unifying principle.*—Reference to the statute generally and to the economics of the industry (described above) will illuminate the meaning of the basic, general standards. The prices must be "just and equitable" and "not unduly prejudicial or preferential" as between producers and as between and among districts; they must be coordinated in common consuming market areas "upon a fair competitive basis;" they must "preserve as nearly as may be fair existing competitive opportunities;" they must "reflect, as nearly as possible, the relative market value of the various kinds, qualities, and sizes of coal;" they must have "due regard to the interests of the consuming public." The meaning of each of these and the other related standards of the Act has been debated before me and analyzed with much wit and ingenuity and with many refinements, and this process has not been without benefit. But in the last analysis the judgments which must be made turn upon the statute itself, without any gloss supplied by counsel, and its direction that the prices must be fair and just; that they must, so far as possible, maintain and reflect existing relationships among the various coals unless those relationships are not "fair." The established prices have been effected upon the basis of methods which carry out this dominant, fundamental direction.

(b) *Existing fair competitive opportunities.*—(i) Purpose of provisions: The provisions of Section 4-II (b) that the minimum prices "shall preserve as nearly as may be existing fair competitive opportunities" expresses a pervasive policy of the Act.

Congress was interested in preserving for producers their existing fair competitive opportunities. However, it did not intend to perpetuate exactly the same state of affairs which existed under free and open competition. The administrative agency was not instructed, and it has not attempted, to remake the industry anew, or to set prices upon its conception of industry efficiency or the advantages of a planned economy. Certain large inequalities in prices have characterized the industry under free competition as a general and fairly constant matter—distinctions in f. o. b. mine prices according to use; seasonal demand; remoteness of markets and meeting of additional competition therein; etc.—and likewise characterize the pattern of the established minimum prices.

However, the Act necessarily eliminates the competitive opportunity to attempt to make inroads on markets by price-cutting resulting in lowering realization per ton below weighted average costs. And the Act also eliminates the competitive opportunity to make sales by means of destructive price-cutting, dumping, the movement

of "distress" coal, manipulations resulting in discriminations between individual consumers in the same market, and all the other chaotic forces which were present in bituminous coal markets under free and open competition.

(ii) Means of preserving existing fair competitive opportunities: (A) The mechanics of preserving as nearly as may be existing fair competitive opportunities cannot be discussed as a separate item in the price process. Such means are utilized throughout the entire process. The pricing of coal so that they will deliver in markets at prices which take into account considerations of quality, attractiveness to consumers and market history, operates to preserve their existing fair competitive opportunities. The reduction of the price at a mine so that the producer may be able, notwithstanding the higher transportation cost, to continue fairly to compete in certain markets, operates to preserve existing fair competitive opportunities.

(B) The ability of coals to secure and maintain existing fair competitive opportunities is determined, as the record shows and as virtually all parties agree, primarily by three factors, referred to as the "big three"—differences in transportation methods and charges, comparative cost of production, and relative quality. Thus, coals of similar quality, coming from districts of similar production costs, are extremely competitive and tend to share the markets to which their transportation costs are the same, and to dominate the markets (such as the home markets) where they have advantageous freight differentials. A highly advantageous freight rate permits a low quality coal from a high-cost district, to offset the competitive advantages of coals operating upon a high freight rate. Where coals are of similar quality and have comparable freight rates, the low-cost districts enjoy a competitive advantage reflected in wider distribution, and the higher-cost coals compete more strongly where they have more favorable freight rates. And finally, as has already been noted, coals of high quality have a much more extensive distribution than lower-quality coals, and are competitively sold notwithstanding the increased freight charge burden.

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(c) *Relative market values.*—(i) Purpose and method of applying the provisions; consideration of both quality and market history: (A) The statute provides that the 4-II (a) prices, proposed with respect to shipment into any consuming market area, "shall reflect, as nearly as possible, the relative market value of the various kinds, qualities and sizes of coal." Section 4-II (b) provides that the 4-II (a) prices for each district shall be coordinated in common consuming market areas and "shall reflect, as nearly as possible, the relative market values, at points of delivery in each common consuming market area, of the various kinds, qualities and sizes of coal produced in the various districts," taking into account various specified factors.

It is significant that in both these provisions Congress used the words "as nearly as possible." Some parties apparently have a concept of relative market value which reduces its ascertainment to the level of simple arithmetic. Actually, its determination generally calls for an exercise of sound judgment in the light of the circumstances of the particular situation, and not for a simple "yes" or "no" answer.

(B) The parties are distinctly at variance as to the proper method of determining "relative market value."

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(C) The standards of the Act require that all factors be weighed to the end that the minimum prices be fair and equitable and afford to all producers, so far as possible, opportunities to compete such as they have fairly enjoyed. Both physical and analytical characteristics, on the one hand, and price history of competing coal, on the other, must be weighed, along with other factors hereinafter mentioned.

* * * Neither of these factors taken alone would lead to a proper result. The provisions of the Act, and the perception of the consequences of applying either method alone, including the difficulties of application and the inequities and absurdities in the results, support this conclusion.

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Relative market value is not a phrase which can be distilled apart from the Act in which it appears. The purpose of the Act, and the other provisions of the Act, preclude the acceptance of a theory which, calling for the preservation of existing market relationships, does not comply with provisions that prices be coordinated "upon a fair competitive basis," that the "prices preserve existing fair competitive opportunities," that they be "just and equitable" as between producers and as between districts, and that they "have due regard for the interest of the consuming public."

That Congress did not intend to perpetuate existing price relationships, regardless of other considerations, is clear not only from the provisions of the Act, but from its legislative history.

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In conclusion, it is plain that Congress intended that all factors bearing upon relative market value be taken into account, and that the application of this provision must harmonize with the other general standards of the Act, including the preservation of existing fair competitive opportunities. And in pricing different coals in a market so as to reflect relative market values and give neither an undue advantage in the market, consideration must be given to the way in which they have tended to sell in relation to each other in the past, disregarding the price factors and variations more attributable to the demoralized and chaotic nature of the industry and its fierce, cut throat competition than to a form of competitive relationships between the coals; and consideration must be given to their relative quality, desirability, and acceptability to consumers. After considering these different factors, appraising them in relation to each other, applying them in the light of the record and the various explanations and contentions of the parties, judgments as to relative market values have been cautiously made and rigorously scrutinized and reflected in the effective price schedules.

(ii) Consideration of quality: (A) An adequate and comprehensive basis for the comparison of different coals, is contained in the proximate analyses and reports of physical characteristics of coals, which were submitted by the district boards or by individual producers, pursuant to the Commission's Orders No. 38 dated August 16, 1937, No. 178 dated January 6, 1938, and No. 234, dated March 16, 1938,

and, in a few instances, the analyses and reports furnished by the Bureau of Mines.

These analyses and reports contained information as to the most widely used and generally accepted indicia of quality, including B. t. u. (British thermal unit) content; proximate analyses (reflecting the proportions of moisture, volatile matter, ash, and carbon); sulphur content; ash softening temperature.

(B) British thermal unit (B. t. u.) content measures the potential heat value of the fuel, and the potential energy derived upon conversion of the heat into steam. Large industrial consumers tend to be guided in their purchases by B. t. u. content, subject to adjustment with respect to the other factors indicated below.

(C) Proximate analyses of coals reflect the percentages of moisture, volatile matter, ash, and carbon in the coal. These factors bear upon the quality of a particular coal as a fuel, and upon its adaptability for use in different kinds of heating equipment, or under different operating conditions.

High moisture content tends to cause coal to degrade in transit or storage and decreases its value, especially for domestic purposes, since it is less suitable for storage. Moreover, the amount of moisture may affect the amount of heat recoverable, for some of the theoretical B. t. u.'s will be used in transforming the moisture to steam and will be lost when the steam escapes through the stack.

High volatile content, in addition to creating a smoke nuisance rendering the coal less valuable or even valueless to domestic consumers, affects the potential heat energy of the fuel coal. The gaseous matter tends to ignite at lower temperatures than carbon and unlike the latter, burns above the fuel bed, and thus, except in a pulverizer installation, is more or less likely to pass out of the flue as smoke, or to condense and adhere thereto as soot.

Ash, being noncombustible, naturally decreases the heat or fuel value of the coal, and a higher ash content generally means greater expense in connection with ash removal or disposal.

(D) High sulphur content bears upon the value of a coal. It may increase maintenance costs because of its corrosive effect on metal work when the flue gases condense and form acids. Sulphur may discolor a coal standing in storage and affects its value to domestic consumers. Its use may generate fumes which may become nuisances and serious detriments to neighborhood industries or residences. When employed for by product use, an excess of sulphur content in the coals may result in corrosive and malodorous gases and a poorer coke for steel manufacture.

(E) Ash-softening temperature (sometimes referred to as ash fusion temperature), if low, generally reduces the value of some coals. When ash softens "clinkers" (vitreous mixtures of ash and other chemical constituents of the coal) tend to form. In stokers or hand-fired equipment, clinkers damage equipment and increase maintenance costs, and prevent utilization of the full potential heat value of the coal by shutting off the flow of air through the fuel bed and entraining or enveloping the fixed carbon. Particularly does low ash-softening temperature lessen value in plants which must operate at a high boiler rating and carry heavy loads, unless they are specially equipped to burn low fusion coals.

(F) Physical properties of coals are also important, particularly with respect to coals sold to domestic consumers. Consideration was given to appearance (color, luster, tendency to stain), structure and the uniformity thereof, cleanliness, size consist, friability, preparation and grindability index, the last factor being of importance in pulverizer installations.

(G) Analytical formulae play an important part in giving a composite judgment of the chemical qualities of coals. Subsequent to experiments and tests by the United States Geological Survey in 1904, there was developed the Bement formula for the mathematical measurement of the relative efficiency of different coals in terms of B. t. u. content and the percentages disclosed by proximate analyses. This formula, or particular adaptations thereof, is used by many industrial and governmental consumers in calling for bids or settling purchase price.

Such a formula is extremely useful in making general judgments as to the relative values of different coals and its importance in this respect should not be minimized. But neither this formula, nor any other mathematical formulae—which are usually directed toward the determination of the number of B. t. u. offered for one cent¹—can serve as a simple rule for determining exact price relationships between coals. Such formulae emphasize B. t. u. and ash content, but do not take into account general consumer acceptance, uniformity, burning characteristics, size consist, clinking tendencies, ash-softening temperature, sulphur content. The record shows that different consumers have different plant installations and different plant power needs, requiring some adjustment of the Bement formula for precise forecasts of utility. Even as to generalizations, the formula which uses averages of analyses and proceeds upon the assumption of representative samples, has more utility in the case of higher-grade coals than the more variable lower-grade coals. Such formulae are more useful, in ascertaining precise value relationships, where the coals under comparison are generally interchangeable, at least in the particular plant, than where high-grade coals are being compared against low-grade coals. Moreover, such formulae, though indicating efficiency per penny may not indicate the value to the consumer of a higher grade coal which diminishes expense of boiler operation, is less likely to clinker, and is more dependable and efficient under varying load conditions. Nor do they adequately indicate the value to the domestic consumer of the factors relating to appearance, fracture, stocking ability, convenience, etc.

(H) In summarizing, determination of quality depends upon a judgment as to all the factors which make coals desirable to consumers; typically, a formula such as the Bement formula based on B. t. u.'s and proximate analyses; other chemical factors, including sulphur content and ash-softening temperature; physical characteristics; and even prestige and reputation, a factor which may involve consumer judgment as to dependability or utility, and in any event makes coal more desirable to the consumer. The basis in the record for the exercise of such judgments includes the analyses and reports of physical attributes already referred to, and the judgments of experts of the Division's experts; of consumers actually buying coals; and of persons producing and selling coals, including particularly the judgments of the district boards reflected in the 4-11 (a) prices as to intra-district relationships.

(iii) Consideration of market history: (A) The determination of the market history of different coals or sizes is not a mere arithmetical computation. The record contains a wealth of evidence and testimony with respect to such market history. The Division presented experts and the district boards, producers and others likewise presented witnesses experienced in the coal industry. These witnesses outlined their knowledge and amplified their judgments as to market history, and were cross-examined extensively. Thousands of pages of the transcript contain evidence of this nature.

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* * * Congress did not direct or permit us to fix minimum prices at levels and relationships exactly equivalent with any portion or any average of past prices. In requiring that prices be fair and equitable, maintain as nearly as may be fair existing competitive opportunities, and reflect as nearly as possible relative market values, Congress required that many factors (heretofore enumerated) be taken into account, including, conspicuously, the quality of coals. Evidence as to price relationships, therefore, in order to be helpfully pertinent, must be weighted by consideration of these other factors. In a general proceeding involving hundreds of thousands of prices and price relationships, bare figures, as discussed above, tend to distort and not to clarify.

Useful and helpful information as to market history and price relationships, taking into account stability, trends and economic considerations, and eliminating from the judgment abnormal figures, unusual transactions, short-time flurries, is to be obtained from experts of experience and knowledge. The judgment of such men is the product of intimate knowledge and correct perspective, and subjected to the salutary process of cross-examination, it conveys meaning which is illuminating, balanced, comprehensive and helpful.

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(iv) Determination of relative market values in a market: (A) Relative market values have been determined upon the basis of the desirability, acceptability and normal price relationships of the different coals moving into a market. The determination is somewhat complicated by the fact that the efficiency of a particular coal will vary somewhat with the type of fuel-burning installation and the power plant's needs (in terms of loads, etc.). Fuel equipment may affect the price a consumer will pay for a certain coal. Conversely the cheap availability of the coal may affect the nature of the equipment, and, e. g., induce consumers close to a low-grade field to accommodate their equipment to use the low-grade coal.

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(d) *Interests of the consuming public.*—Section 4-II (a) provides that the minimum prices proposed by the district boards in the first instance "shall have due regard to the interests of the consuming public." This standard must, of course, be read and applied consistently with the purpose and other standards of the Act.

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The interest of the consuming public cannot be definitively ascertained. Consumers express some conflicting desires. And the interest of many consumers does not necessarily coincide with the interest of

the entire public. Many consumers want lower prices, regardless of the consequences to the coal industry, but Congress itself set a floor on prices. Consumers may want prices to reach them in the cheapest way possible, say, by truck, and to get the full benefit of the cheapness of this form of transportation. Yet factors of expense may be cut across by factors of availability of transportation facilities, stability of movements and certainty of supply. And observance of the interests of the consuming public cannot be deemed to require prices which do not preserve existing fair competitive opportunities.

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(e) *Dumping*.—Section 4-II (a) provides that “no minimum price shall be proposed that permits dumping”. The standard is not expressly repeated in Section 4 II (b), though it is obviously one phase of the provision that the prices shall be just and equitable and shall preserve, as nearly as may be, existing fair competitive opportunities. Dumping is the sale of surplus coal production in an abnormal and unnatural consuming market, and without regard to cost. The method of fixing minimum prices is such as to prevent dumping. Any specific contentions to the contrary are dealt with elsewhere.

(f) *“Just and equitable” provisions*.— * * *

4. *Provisions Outlining Specific Factors.*

Congress, in addition to stating the broad aims governing the pattern of minimum prices,—primarily the reflecting of relative market values and the preservation of existing fair competitive opportunities—indicated to some extent the method of achieving those ends by outlining for consideration certain specific factors.

(a) *Transportation methods and charges*.—Section 4-II (b) provides that 4-II (a) prices shall be coordinated in common consuming market areas, that such coordination shall take into account, among other factors, transportation charges upon coal, and that the coordinated prices “shall reflect, as nearly as possible, the relative market values, at points of delivery in each common consuming market area, of the various kinds, qualities, and sizes of coal produced in the various districts, taking into account * * * *transportation methods and charges* and their effect upon a reasonable opportunity to compete on a fair basis * * *”

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(i) All-rail coals: (A) The Act specifically indicates the importance of transportation methods and charges as involved in both the reflecting of relative market values, and the primary standard of preserving existing fair competitive opportunities. The general method of coordination of coals from competing districts moving by rail into a common consuming market area has already been explained. Generally, a representative destination, typical of the competitive situation in the market areas is chosen, and the f. o. b. mine prices of the base coals of each of the competing districts are adjusted so that the coals deliver at such destination at prices reflecting their relative market values, size for size, and class for class. The taking into account of the transportation charge frequently requires that an f. o. b. mine price for a coal be set which is lower than the f. o. b. mine price of the same coal when shipped into a different market area, i. e., requires an adjustment of the f. o. b. mine price. It has been generally true under

free and open competition that producers have charged a lower f. o. b. mine price as their coal moved farther away from home and encountered, in addition to the usual competition between the producers in the home field, the competition of other districts shipping into the more remote market area. And this general characteristic of the industry, reflecting its fair competitive opportunities, is preserved to a considerable extent in the effective minimum prices.

Although such special adjustments of the f. o. b. mine prices appear frequently in the minimum price schedules, they are granted only in order to preserve existing fair competitive opportunities and reflect relative market values at consuming points. There has been practically no objection to the theory of providing for such adjustments.

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The minimum prices established f. o. b. the mines have been adjusted in cases where that was necessary to reflect existing fair competitive opportunities, and actual competition between producers and districts at a market; the f. o. b. mine prices have been kept the same, leaving the coals "free to ride on their freight rates", where that will preserve existing fair competitive opportunities, as where the coals have in essence so moved in the past,

(ii) River coals: Section 4-II (b) provides that the agency shall take into account not only transportation charges as such, but also "transportation methods." Coal is transported other than by rail. It is transported by truck and by water—by river, by the Great Lakes and by tidewater. The competitive situation differs with respect to each of these methods of transportation and in order to preserve the existing fair competitive situation, the prices have been established so as to take account of these differences.

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In general, coal moving by river to destinations on the river, that is, for free alongside delivery, has been given the same minimum f. o. b. mine price as for all-rail movement from the same district to important market areas served by such river coal. Accordingly, where the difference between water transportation charges and all-rail or truck transportation charges has been sufficiently great to confer a definite competitive advantage on river coal, the same competitive advantage will continue and river coal sold for minimum prices will deliver at less than all-rail or truck coal to such a destination or plant on the river, just as it has in the past.

The pricing of "ex-river coal", i. e., coal moving via the river and thence to inland destinations, raises the serious problem of maintaining the competitive situation between rail coals and river coals. In many markets, all-rail coal has maintained a substantially competitive position against ex-river coal and the assignment of the same f. o. b. mine prices for coals moving by river as for coals moving all-rail would permit the former coals to assume delivered prices lower than those of the rail coals and so broaden their fair competitive opportunities. This was demonstrated by the movements to a destination, such as Cleveland, Ohio, where there has been a very small movement of ex-river coal and a tremendous movement of all-rail coal. During previous periods of governmental price fixing, when ex-river coals

were not subject to the same price restrictions as all-rail coals, the ex-river coals were able to move to Cleveland to an extent to which they had not done and apparently could not do, under free and open competition. Accordingly, prices have been set up so as to accomplish an equalization of the all-rail and ex-river delivered prices, taking into account the actual river transportation charges.

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(iii) Truck coals: (A) Coals move by truck primarily within the home markets of the producing districts, or in regions adjacent thereto. The minimum prices for truck coals have been established by relating them to the minimum prices for rail coals, taking account of the fact that the coals are similar, being generally mined in the same seam, and often at the same mine. As explained by the Examiners, generally coals moving by truck have been given a single f. o. b. mine price, rather than f. o. b. mine prices for different market areas, because truck coals are purchased in substantial amounts by itinerant truckers and their ultimate destination is uncertain; truck coals are customarily sold at the same price f. o. b. the mine; and a substantial percentage of truck tonnage moves into the home markets. * * *

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The typical home market analysis has not been applied to certain markets where truck and rail competition has been intensive, and vigorous competitive opportunities have been maintained notwithstanding the differences in transportation charges for truck movement and for rail movement (e. g., Pittsburgh, St. Louis). In these instances, the prices for the districts concerned have taken more carefully into account the transportation charges and effected adjustments in the f. o. b. mine prices so as to continue existing fair competitive opportunities.

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(iv) Tidewater coals: * * *

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The same basic principles of coordination were involved in the pricing of tidewater coal as were applied with respect to all-rail shipments. However, there are certain problems of coordination peculiar to tidewater coal. These problems arise out of the numerous important variables which enter into the competitive situation at tidewater, particularly in regard to boat rates and, at some destinations, dock-handling and service charges and ex-tide trucking charges. Such variables render impracticable coordination in the sense of precise, equivalent delivered price relationships and necessitate coordination on the basis of equalized delivered prices at competitive destinations predicated upon generally prevailing costs of transportation and handling and calculated to preserve to Districts 1 and 7 their respective "spheres of influence" at tidewater.

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(v) Lake cargo coals: * * *

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The same general principles of coordination were applied in the pricing of lake cargo as in the pricing of all rail shipments. The application of principles necessarily took into account the problems

peculiar to the lake markets. Since the great volume of the coal is sold to purchasers at the Lake Erie dumping ports, competitive coals were related to one another at the dumping ports and those competitive relationships were reflected back into the minimum f. o. b. mine prices. Competitive coals shipped to Lake Ontario dumping ports were similarly related one to another. However, the propriety of these competitive relationships was properly tested by taking into account the charges for vessel transportation to various points of delivery in Market Areas 98 and 99, to which such coals are shipped, dock handling charges and ex-lake dock transportation charges to inland points of competition, and the effect of such charges upon a reasonable opportunity to compete.

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(b) *Common consuming market areas.*—Section 4-II (b) provides that the 4-II (a) prices shall be coordinated “in common consuming market areas upon a fair competitive basis.” This provision is not a substantive one so much as a matter of mechanics for the effectuation of the other standards of Section 4-II (b). In general, these market areas have been delineated upon the basis of factors tending to shape the competitive situation in a particular region—the existence of a fixed freight differential, the extent of the competitive influence of a particular field, etc. There have been practically no objections on grounds of principle to the general methods followed in establishing such market areas. The questions as to boundaries are questions as to judgment and detail.

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(c) *Values as to uses.*—Section 4-II (b) provides that the coordinated minimum prices shall reflect the relative market values of the various kinds, qualities and sizes of coal “taking into account values as to uses * * *.”

(i) This provision recognizes a well-known characteristic of the bituminous coal industry—that different coals, and different sizes of coal, have different relative market values, both in terms of utility and in terms of market history, depending upon the use to which the coal is put. The coal industry is not unique in this respect. Price regulation of the milk industry, for example, has had to take account of the fact that milk has a different value, and will fetch a different price, depending upon whether it is to be used for domestic fluid consumption, for cheese-making, for butter-making, etc.

Railroad fuel is a typical example of a “use” classification established under the Act. Railroads, purchasing coal for use in mobile locomotive boilers, are not interested in the same considerations which prompt the purchases by industrial consumers for stationary boiler use. Low volatile coals, generally more valuable than high-volatile coals for general commercial use, are not as satisfactory for locomotive fuel use. And as between high-volatile coals, differences in B. t. u. content, etc. are not as important for locomotive boilers as for stationary boilers. The large lump sizes are not efficient in a locomotive boiler, and the differences between other sizes are generally not significant insofar as railroad locomotive fuel is concerned.

Railroad fuel has not been marketed in the past in the same way as commercial fuel, although relatively stable price relationships have been built up. In the first place, the whole factor of transportation

charges, which is interwoven in the pricing structure of commercial coals, disappears to a large extent with respect to purchases by railroads. The cost to a railroad of hauling coal on its own line, which is markedly different from commercial freight rates, is not viewed as a transportation charge, but as an operating cost of the railroad. Even as to purchases from "off-line" mines, the railroad division differences are not the same as the commercial freight rate differentials. Reciprocal relationships, and the prospect of revenues derived from coal shipped as commercial freight, have played an important part in the market relationships and the price differentials which have prevailed in purchases of railroad fuel. These factors have been given due consideration and weight in establishing railroad fuel prices.

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(iii) The established schedules also contain separate prices for the sale of coal for various by-product purposes. This classification is justified by custom and by the different considerations as to physical characteristics, and the different emphasis upon such considerations, which govern the purchases of coals for destructive distillation by various methods rather than for combustion. * * *

(d) *Seasonal demand*.—Section 4-II (b) provides that the coordinated minimum prices shall reflect relative market values "taking into account * * * seasonal demand."

Production of industrial sizes during the summer brings with it production of the larger, so-called domestic sizes for which there is no demand. Coals, including e. g. the high quality coals of Districts 7 and 8, which do not degrade easily, have been able to build up a demand, by offering the larger sizes at a discount during the late spring and the summer months, and have built up fair competitive opportunities upon this basis. The effective prices contain such seasonal discounts for coals which have customarily been sold on that basis.

(e) *Competitive forms of fuel and energy*.—Section 4-II (b) provides that the minimum prices shall reflect the relative market values in each common consuming market area of the various kinds, qualities and sizes of coal, taking into account various specified factors "and the competitive relationships between coal and other forms of energy".

There is little disagreement as to the principles involved in considering this factor. Where bituminous coal has maintained a competitive position against gas, oil, electric power, anthracite coal, it is important that the fixed minimum prices permit such competition to continue. On the other hand, there are many markets which bituminous coal has completely or virtually lost to competitive fuels. In view of the realization and other standards of the Act, including the preservation of existing fair competitive opportunities, it is plainly not the function of the minimum prices to attempt to reach such markets by artificially depressed levels and to average out cost levels by fixing disproportionately high prices elsewhere. Moreover, it is practically impossible to reverse the trend to competitive fuels in markets where it has been effected.

5. *Realization Standards*.

The Act provides standards with respect to the "realization" of the industry under the Act. Certain questions have arisen as to the application of these standards.

(A) Section 4-II (a) provides that the prices classifying the coals within the district shall be proposed by the district boards so as to yield a return per net ton for each district in a minimum price area equal to the weighted average cost per ton of the minimum price area. It further provides that the Commission approve, disapprove, or modify these prices as a basis for coordination.

Section 4-II (b) provides for the coordination of the 4-II (a) prices in common consuming market areas, subject to various standards discussed above, and continues:

The minimum prices proposed as a result of such coordination shall not, as to any district, reduce or increase the return per net ton upon all the coal produced therein below or above the minimum return as provided in subsection (a) of this Section by an amount greater than necessary to accomplish such coordination, to the end that the return per net ton upon the entire tonnage of the minimum price area shall approximate the weighted average of the total cost per net ton of the tonnage of such minimum price area.

The purpose of these provisions is clear. The dominant realization standard of the Act, the "end" to which the prices are directed, is that the realization per net ton for each minimum price area shall, consistently with the requirements of coordination, approximate the weighted average cost of the minimum price area.

The other provisions are merely mechanical directions provided by Congress in helping to reach that end. A few parties complain that the realization of several of the districts differs from the cost of the price area. But Congress did not contemplate that finally the realization for each district would really correspond to the cost of the price area. The districts differ markedly in weighted average costs both from each other and from the price area. In providing that the 4-II (a) prices, which were important primarily as setting up relationships between coals, should have a realization to each district corresponding to the cost of the price area, Congress was merely outlining a mechanics of initiating the coordination process, with its considerable changes from the 4-II (a) prices, at such a level as to facilitate consummation of coordination with the realization of each minimum price area approximating the cost of the price area.

That the dominant "realization" standard is that the return per net ton for each minimum price area be equal to the weighted average cost of the minimum price area is clear. * * *

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Problems may develop as to the scope of the orders entered in General Docket No. 15 and General Docket No. 12 and the transactions to which they apply. The Division will endeavor to clarify any such problems which are presented by actual and concrete situations.

Certain comments as to the transactions covered by the orders may appropriately be made at this juncture.

1. Territorial Application.

The territorial application of the price is indicated by Section 4 II (e) of the Act.

2. Coverage of Code Members.

Section 4 is applicable to all Code Members. The intent of Congress was, of course, that the Commission fix minimum prices

governing all mines in operation by Code Members. This end has been achieved by various procedures.

(a) Most of the mines in operation today were included within the 4-II (a) price schedules proposed by the district boards and approved or modified by the Commission as a basis for coordination.

(b) After the 4-II (a) price schedules had been prepared, additional coals became subject to the Code, either through new acceptance of Code membership or the opening of new mines. Pursuant to the Commission's Order No. 270, dated March 20, 1939, the district boards have proposed and submitted price classifications and minimum prices for such coals. Code Members have been permitted to file protests. Some of these classifications were received before the Commission had finished the process of coordination, and were included in the coordinated price schedules.

Other price classification proposals were received thereafter, some with respect to coals which became subject to the Code after the coordination hearing had started, and these were coordinated by the Division in accordance with the Commission's coordinated prices. The Division issued orders setting forth the supplemental minimum prices and classifications proposed for these coals, and providing for a hearing thereon as a phase of the coordination hearing.

Prices for these coals were included within the recommended price schedules and have been included in the effective price schedules. It has been objected that the district boards did not attempt to coordinate the prices for these coals in the consuming market areas. The objection is not substantial. The Director fully agrees with and accepts the findings of the Examiners that the procedure adopted for the pricing of these coals is a fair and effective procedure conducive to the proper formulation and proposal of coordinated prices as a subject for hearing, afforded adequate opportunity to all persons to adduce relevant testimony, and was not in violation of the provisions of the Act.

(c) Pursuant to Order dated June 24, 1940, as amended, providing for an auxiliary proceeding, adjunct to General Docket No. 15 and designated General Docket No. 15-A, minimum prices will be made applicable to a number of mines not hitherto covered in General Docket No. 15, accounting for relatively minor tonnages. Order No. 290 provides a means for the application of minimum prices to persons who are not otherwise covered.

(d) The schedules of effective minimum prices for the various districts are applicable to the mines listed therein and continue to be applicable although such mines have been transferred or hereafter are transferred to a person who is or thereafter becomes a Code Member. The prices established for the coals produced at any mine shall apply to the code member who currently controls the mine regardless of whether or not such code member's name is listed in the price schedule or the name of the mine has been changed. This continuity is clearly contemplated by the Act and is necessary as a practical matter in order that the effective minimum prices shall have a measure of permanence and so that the competitive relationships encompassed in the effective schedules shall not be disturbed by changes to the title or operating interests in mines. Dissatisfactions may be made the subject of petitions under Section 4-II (d).

3. *Sales by Distributors.*

The minimum prices and marketing rules and regulations must likewise be observed by all persons who are distributors within Section 4-II (h) of the Act whether registered or not. Producers who are Code Members may, of course, sell to those distributors who have registered as such with the Division and have complied and are complying with the applicable provisions of the law and regulations, at prices which are reduced by discounts not greater than the maximum discounts prescribed by Order dated June 19, 1940, entered in General Docket No. 12.

4. *Coverage of Future Deliveries.*

The Order entered in General Docket No. 15, subject to the adjustments provided in General Docket No. 12, is applicable to all coal sold by Code Members after September 3, 1940, and is also applicable to all coal delivered by Code Members after that date whether or not such coal has previously been sold or been the subject of a contract to sell. This ruling is contemplated by Section 4-II (e) which provides that no coal shall be sold or delivered or offered for sale at a price below the minimum established by the Commission, and that such sale or delivery or offer for sale shall constitute a violation of the Code. And it is indispensable to a practicable administration of the Act, since otherwise "title" might be passed to large amounts of coal to be delivered and consumed far in the future. Continuing deliveries of such coal without regard to the price provisions of the Act would lead to substantial unfairness, and derangement of existing fair competitive opportunities, not contemplated by Congress.

5. *Inapplicability to "Wage" Coal.*

The effective minimum prices do not apply to sales of bituminous coal by employers to employees as part of a wage agreement. The record in General Docket No. 15 refers to the letter which the Commission issued on October 17, 1938, to various members of the coal industry, stating that sales of bituminous coal by Code Members to their employees as part of their wage agreement would not be subject to minimum prices. The Director, in accordance with the general spirit and purpose of the Act, finds that effective minimum prices are not applicable to sales of coal made by a Code member-producer to his mine-worker employees for household consumption, in situations where such sales are made pursuant to an agreement between the employer and employee pertaining to wages, hours of labor, or working conditions, since the price specified for such coal is part of the consideration of the wage agreement.

IV. NATURE OF THE PROCEEDING IN GENERAL DOCKET NO. 15

1. *Legislative Character of Proceeding.*

Some of the participants or their attorneys in General Docket No. 15 regarded the proceedings as strictly judicial proceedings, like an ordinary court case. Perhaps it would be more accurate to say that they regarded General Docket No. 15 as equivalent to a vast number of cases, proceeding simultaneously.

This is a fundamental misconception. The proceeding is more accurately a legislative one. It is directed toward the establishment

of orders governing the bituminous coal industry in the future. It is not a question of resolving private rights so much as of stating, pursuant to the standards of the Act, minimal conditions to be observed by persons and corporations in the bituminous coal industry. The application of statutory standards does not consist wholly of the ascertainment of facts. It calls for the exercise of judgment in the appraisal and consideration of the conditions of the bituminous coal industry and the probable effect of particular prices on that industry or on a segment of it. It calls for the consideration and keeping in balance of a great number of different factors operating throughout the country in this gigantic, dynamic industry, and for predictions as to possible disruptions in the industry, etc.

* * * * *

2. *Position of the Division.*

Some of the parties have envisaged General Docket No. 15 as an adversary proceeding, with the Division on one side and the producers, say, on the other. That is not a true picture. It derives from the attitude which has been developed in some circles, whether rightly or wrongly, with respect to agencies entrusted with the regulation of one group in the interests of another group which the public desires to protect and assist—regulating employers to protect employees; regulating commission men to protect livestock producers, etc. The Act administered by the Division, however, regulates bituminous coal producers in the interests of the bituminous coal producers, among others, and lays down standards to that end. The Division is concerned with fixing prices in accordance with the standards of the Act upon the basis of the true situation and as much evidence as can feasibly be collated and presented. It is not the protagonist of any special group, nor does it have any special regard for any particular group.

* * * * *

The Director's report is long, despite an attempt to keep its length down to a minimum. The following considerations may be helpful to an understanding of the intended scope and content of the Director's report:

(a) Effort has been made to avoid unnecessary and useless repetition of the Examiners' report. The Examiners' report and recommendations constituted an extraordinarily comprehensive document. If only for its accomplishments in organizing the material and focussing the issues contested, it is of great utility. Furthermore, it contains a complete discussion of many of the issues contested before the Director.

The Director has carefully considered and studied the Examiners' report, in the light of the record and the objections of the parties. Upon the whole it is sound and the recommendations are in accordance with the evidence and with the Act. The Director therefore accepts and adopts the findings of the Examiners, subject to such modifications as are specifically indicated below.

Where the Director disagrees with the Examiners' findings or recommendations, or both, that has been specifically indicated in the appropriate place in the findings. More often, the Director agrees with the recommendations of the Examiners, in whole or in large

part, and also approves their findings, but deems it pertinent either to add an observation, or briefly to summarize the considerations adduced by the Examiners. The fact that the Director has discussed a problem does not indicate that such discussion is intended to be exclusive. In such instances the Director's findings are not intended to replace the Examiners' findings but to be read in conjunction with them, unless the Director's findings show that the Examiners' findings have been rejected.

(b) The Director has attempted to discuss all substantial exceptions. Such an approach was not necessary in this general price proceeding. Indeed, it is often not used in judicial proceedings. But it often occurs that a sense of injustice, or inadequate treatment, is felt by those whose contentions are not specifically considered. All claims have been carefully considered and the Director felt it worth a slight amount of extra time to outline their separate disposition. Of course, similar exceptions have been grouped in the Report. And in some instances, as in the general considerations set out above, the decision of and findings on one exception have been deemed sufficient to dispose of other related exceptions without specifying the filing of such other exceptions and their individual differences.

The Director's Report, with its approval in large measure of the Examiners' Report, is, however, a unified document. In many instances a complete segment of findings, presented in connection with one exception, necessarily underlies and must be integrated with the findings on other exceptions. Obviously, continual repetition was neither sensible nor practicable.

The determination to give consideration to specific exceptions has tended to give the findings a lop-sided appearance and one not sufficiently indicative of the general approach to the price-fixing process. As already stated, the more general evidence and findings are not iterated and reiterated, while the very number of specific exceptions makes their disposition loom disproportionately large in the Report. This aspect of the Report should not obscure the fact that the prices have been approached primarily and dominantly upon a general basis, with particular consideration to specific situations left, for the most part, to adjustments under Section 4-II (d).

The Director's findings are more elaborate as to some exceptions than others. In part, as already stated, this is due to the avoidance of repetition of findings. In part this is due to the fact that certain issues discussed in the findings are more significant in the industry and important to the parties than others. Examination, cross-examination and filing of exhibits have been much more intensive with respect to such issues. And the Director has endeavored to include a correspondingly extensive review of these issues.

(c) The consideration of separate exceptions has obvious limitations depending upon the exceptions. Exceptants have responsibilities. An exception should be clear and precise, and should give reasonable indication of exactly what objection is being urged upon the Division. No such indication is afforded by blanket exceptions that the Examiners' findings on a problem do not conform to the standards of the Act; that the findings are not supported by credible evidence; that a particular pricing relationship is objectionable, in a way not further detailed. Such exceptions cannot be answered except by a recapitu-

lation of the entire problem in the record, or by a guess as to what it is that the exceptant may have in mind. No such burden can possibly be assumed by an administrative agency. The exceptant has a definite responsibility to "urge" his objection so that its purport and significance can be grasped, and he cannot slough off this burden by presenting certain points in meaningful fashion and cautioning the Director also to give due consideration to all other exceptions.

(d) Certain parties have requested more detailed findings than those made by the Examiners. One party, Wheeling Township Coal Company, has even excepted to the failure of the Examiners to rule one way or the other on its requests for findings on certain points. The Director has attempted to give fair indication of the factual basis of his rulings, especially when a party has made complaint on such ground. But the Report is primarily an explanation of the Division's prognosis as to the price structure which will be operative in the future rather than a judicial pronouncement as to conditions in the past. And a report covering the general price structure for the entire coal industry is not a place for long stories. No attempt has been made to cover all the details. And there has been no effort to assure that a finding is made one way or another on facts which the Director regards as irrelevant or overridden in significance by larger considerations. As a practical matter, the interest of the industry as a whole in reasonable expedition, and the obvious propriety of restricting this report to matter which is meaningful and pertinent, preclude any other course of action.

(e) The Director's findings are based solely upon material in the record and fair inferences therefrom. Indeed, the Director has failed to accede even to requests based upon matter not contained in the record, alleged to call only for mechanical adjustments. The Director believes it the course of wisdom and prudence to deny such requests, especially since an expeditious and flexible remedy available for such situations is at hand in Section 4 II (d). In this way no one can make any possible claim of unfairness, and all issues can be disposed of in orderly fashion. However, the Director sees no purpose that would be served by granting motions which have been made by various parties formally to expunge certain briefs as containing references outside the record or otherwise not appropriate in this proceeding. It is sufficient to reiterate that the findings are based solely upon the record.

PART IV

**A CRITICAL REVIEW OF SOME INSTANCES
OF GOVERNMENT PRICE CONTROL**

By

DONALD H. WALLACE

AUTHOR'S PREFACE

Part IV of this report on Government Price Control is essentially a summary and a comparative analysis of the material presented in parts I-III treating selected instances of public control in electricity, milk, and bituminous coal. Some additional material has been introduced here and in some instances the analysis has been carried beyond that of the monographs forming parts I-III. Some of the conclusions differ from those of the authors of these monographs, although in the main there is agreement with their conclusions.

Chapters II through XI present a summary description of the control agencies and control devices used in the instances of public control treated in parts I-III, and an analysis of the objectives, standards, and actual or possible results. This analysis is centered upon the three major economic problems outlined in the first chapter—(1) the height of the general level of prices and incomes in a firm or industry; (2) the nature of the structure of prices paid by different groups of consumers of the products of a firm or industry; and (3) the relation between the prices of a firm or an industry and the volume of employment of economic resources in the whole economy, in other words, the relation between prices in a particular firm or industry and general depression and recovery. In these chapters the treatment is by topics rather than by industries and under each of these problems the experience in all three industries is treated.

In order to put the problems in a realistic setting, there is presented in chapter I a brief review of the changes in the American philosophy on public control of industry which have attended the great changes in the industrial and social structure of the United States in the last six or seven decades.

Most of part IV was written before the defeat of France and the inauguration of the defense program in the United States. The necessity of national defense alters the objectives of public control in some ways, and the defense program may go far to diminish unemployment of men, machines, and money in the next few years. Whenever spending on armament tapers off, however, depression problems may again become acute. Furthermore, it is plain that there must be some reorganization of our foreign trade and the industries participating largely therein, although what will be needed in this respect is at present far from clear. Under new conditions that represent drastic changes from those preceding, some parts of the analysis and conclusions given in these chapters will need qualification and emendation if they are to be useful guides to policy.

CHAPTER I

THE BACKGROUND OF PUBLIC CONTROL

THE CHANGING AMERICAN PHILOSOPHY OF PUBLIC CONTROL OF INDUSTRY

Until recently public policy toward industrial organization and business policies in the United States has been based on a twofold classification of industries—competitive industries and “natural” monopolies—and two basic kinds of public control to fit these two classes of industries—the antitrust laws and regulation of investment, prices, and profits by administrative commissions. The antitrust laws were to preserve freedom to compete, and hence indirectly to produce socially desirable prices and profits and high efficiency and progressiveness. Regulation of a few industries, such as rail transport, telephone, electricity, gas, and water, which had developed for some time under substantially unregulated free enterprise, was inaugurated upon growing realization that in these particular necessary services monopoly could not be prevented by antitrust laws and that competition was in any event wasteful and ruinous owing to certain technological and financial characteristics. Administrative commissions were established to prevent monopoly profits, to insure reasonable prices or rates, and to prevent the waste of capital and investors’ losses attending duplication of capacity or financial overcapitalization.

This view of the economic system, and the corresponding two-sided public policy was the American answer to the radical changes in industrial structure which began to be significant soon after the Civil War, especially the growth of big business. This public policy was worked out over the half century 1870–1920, rather uncertainly and haltingly in the first 30 or 40 years of that period. It became crystallized in the decade 1910–20, in spite of the somewhat disturbing influences of the war, first through definitive interpretation of the Sherman Act as a statute prohibiting combinations or practices which restrained or impaired free competition; second, through passage of the Clayton Act and the Federal Trade Commission Act which were intended better to define and implement this policy; and third, through the spread of public utility regulation among the States and the strengthening of Federal regulation of the railroads.

Although Government control of industry of the two kinds just described was greatly extended during these five decades, this policy represented no fundamental break with the traditional philosophy in which freedom of private enterprise was regarded as a highly valued thing in itself and private initiative and market stimuli were relied on to produce an ever larger national income, jobs for all, and a desirable distribution of income.

The antitrust laws were essentially an endeavor to check a threatening trend toward destruction of the freedom to compete in many

industries. To accomplish this end it was believed that Government must outlaw agreements between competitors, harassing or bludgeoning competitive tactics, appropriation or imitation of innovations, and fraudulent misrepresentation. Some thought that in addition to these things, which came to be prohibited according to court interpretations of the antitrust laws, it was necessary also to check or reverse the increasing corporate concentration of control over capital and natural resources—even where the methods used to increase concentration were in themselves “fair”—in order to prevent elimination of great numbers of small, independent businessmen who, it was held, constituted the core of free democratic capitalism. Definitive interpretation of the antitrust laws placed no restrictions, however, on corporate concentration that did not contravene the particular prohibitions mentioned above. After the ambiguity of early Sherman Act decisions, these laws were not interpreted as statutes prohibiting any particular degree of concentration *per se*, but rather as laws prohibiting methods that interfered with freedom to compete.

Nor did the inauguration and development of public utility regulation represent any fundamental departure from the traditional philosophy. Where State and Federal Governments assumed direct responsibility for determining or placing limits on prices, profits, investment, and quality of service the objectives were essentially negative—to prevent unnecessarily high prices and profits, unfair discrimination between customers, waste of capital, and unsafe or very poor quality of service. Reliance for positive creation of desirable results such as improvements in efficiency and in quality, designing price structures that increased consumption, and so on, was left mainly on private initiative. Indeed, the major idea underlying public regulation of private enterprise was to obtain the advantages of private enterprise while preventing the disadvantages of private monopoly. Public ownership was regarded as of doubtful foreign heritage, as an unjustifiable invasion of private rights, and as woefully inefficient. Although constitutional interpretation placed much less restriction on the power of the States and municipalities to engage directly in production and sale than to regulate private enterprise,¹ Government ownership played, in fact, a small role.

The general theory of free enterprise expressed in the antitrust laws applied, of course, to agriculture as well as to manufacture, mining, and trade. The position of labor under this system of law and economic policy can be sketched briefly.

Labor unions were not in themselves illegal under the antitrust laws, but tactics used by unions which physically obstructed the free flow of commerce or interfered by coercion with the freedom of a third party (e. g., the secondary boycott, a boycott of one who was not a party to the dispute) were generally held illegal under the common law and, until recently, under the antitrust laws. The power of the unions was limited in many other ways by court interpretations of the Constitution, of other statutes, and of the general system of law and equity based on concepts of individual liberty and private property rights. Minimum wage laws and some maximum hour statutes were held unconstitutional. Government gave little assistance to labor organization or collective bargaining. In short, wages, hours, and working conditions were to be determined in free markets, containing

¹ D. M. Keezer and Stacy May, *Public Control of Business*, pp. 195-196.

only such labor organizations as the workmen themselves could maintain. In practice this meant in most cases no effective organization.

Moreover, during the period 1870-1920 Government assistance to free, private enterprise had been confined principally to provision of cheap land to farmers and such natural resource industries as mining and lumbering, subsidies for railroads, and protective tariffs for manufacturing industries.

These were the main outlines of the "American system" as it was conceived 20 or 25 years ago by most Americans. Even during the time when this system was crystallizing in law and in policy, strong objections to some features of it were emerging; even before the great depression of the thirties altered the views of many with regard to the responsibilities of government, objections had multiplied and actual policy changes had begun. The simple classification of industries into "naturally competitive" and "naturally monopolistic" showed signs of breaking down. The ineffectiveness of commission regulation of the "naturally monopolistic" industries threw public enterprise into higher relief as an alternative worthy of serious consideration. There were increasing demands upon Government to permit or assist in associative action to "stabilize" or increase prices and incomes, and to assist labor. During the past decade there have been further criticisms and marked changes in public policy. Disregarding the abortive N. R. A., it is enough to mention the new State and Federal policies with regard to distribution² and agriculture, and bituminous coal acts, public enterprise in electricity, the Wagner Act, and the wages and hours legislation.

The principal objections raised by those who wanted to change the "system" that crystallized a quarter century ago may be classified into three groups.

First, prohibition by the antitrust laws of associative action results in "ruinous competition" and "disorderly" markets in many industries. Government should permit and, where necessary, assist producers to stabilize prices and incomes at desirable levels. This is, of course, essentially a request for maintenance of higher prices and larger earnings for past investments than would exist in the absence of cooperative market control or Government regulation of price or output. Before the depression, Government had exempted agricultural cooperatives, under certain circumstances, from the antitrust laws and had attempted an indirect form of price control through the Farm Board. States were attempting control of output in oil. The Department of Commerce was aiding trade associations to develop activities which many thought tended to increase private price control.

During the depression, pleas for relaxation of the antitrust laws and Government assistance in control of prices, output, and incomes multiplied enormously. Unemployment led to more vehement requests from labor for collective bargaining for minimum wages and for minimum price fixing to prevent wage cutting. N. R. A. tried to meet all of these demands from business and labor in greater or lesser measure. After the demise of the National Recovery Administration, the Wagner Act and the wages and hours law and the two bituminous coal acts were enacted. But the antitrust laws have not as yet been modified in principle. Indeed, the recent trend has been toward much more

² For example, the State price maintenance laws and the Federal Miller-Tydings Act, the unfair practice acts purporting to prohibit sales below cost, and antidiscrimination laws such as the Robinson-Patman Act.

effective enforcement of them. The agricultural program has endeavored to raise farm income from different crops by various devices—control of prices, output, or acreage, or loans and carryover.

Public utility regulation has not been immune from the same sort of criticism. There seems to have been an increasing disposition particularly on the part of railroads and institutional investors, which hold large amounts of utility securities, to maintain that a major object of Government regulation should be preservation of the earning power of past investments in utilities in the face of depression, or the growth of competing substitutes.

The severity of depression in the thirties quite naturally intensified all of these objections to the "system" characterized by antitrust laws to preserve free competition in most markets, by public utility regulation to prevent monopolistic exploitation in the few exempted from the antitrust laws, and by the absence of Government assistance to businessmen, farmers, and labor in maintaining or raising incomes or improving working conditions of particular groups. But it would be a serious mistake to ascribe these objections entirely to depression conditions. With the disappearance of the frontier and the growth of great corporate bureaucracies this has given way in considerable measure to the idea that democracy means, among other things, a rising standard of living, increased economic security, and a greater share for all of the people in the determination of the conditions under which they live and work. They also represent some change, of a fundamental sort, in the notions of democracy or in the things that people expect of Government. A democratic government should, it is now much more widely believed, permit people to organize to obtain desired ends and should assist them with the power of Government where private organization is itself inadequate. These demands and attendant changes in public policy which have emerged in recent years are but a part of a broad trend exemplified also in the social security program, and the provision of more social services to low-income groups.

Second, whereas the first set of objections has come chiefly from producers—businessmen, farmers, and labor—and those indented with their interests, the second set of criticisms has emerged largely from students of these problems. In many industries, this school of thought suggests the antitrust policy cannot, even though it is successful in eliminating collusion, maintain effective competition; for the large corporation with only a few large rivals, or even with many small competitors, possesses substantial power to control prices and output, and this power is used to restrict output and maintain prices at high levels. Where the entrance of new investment is difficult, owing to control of scarce materials, to the power of established advertising, or to fear of destructive economic warfare against "interlopers," profits may be much larger than necessary to induce the services of capital and enterprise. Where establishment of new capacity is easy, profits may be brought down or held down to a normally moderate level, but only by the inflow of more investment than is needed, for all firms in such a market operate almost continuously below capacity, striving to use their power over prices and output to gain monopoly profits by restriction. The general result is held to be too little investment in some industries and waste of investment in others and prices that are too high in both cases.

According to some, dissolution of the great corporations to restore effective competition is impracticable; according to others, it would severely impair efficiency in production and marketing.³ Both opinions lead to the view that industries containing a few large enterprises are not "naturally" competitive and cannot be made sufficiently competitive to achieve desirable prices and profits and desirable volumes of investment and output. It is held that in such industries, desirable results are to be secured only by direct public control of one sort or another.⁴ Commission regulation is the instrument most often advocated. Federal licensing of corporations engaged in interstate commerce has also been proposed.

Public regulation of maximum prices has also been advocated by many businessmen and lawyers who have urged relaxation of the antitrust laws to permit agreements to stabilize prices or to maintain prices above a ruinous level. Judge Gary's early advocacy of such a policy found an increasing number of adherents during the twenties.

It is clear that both economists and businessmen have come to find it exceedingly difficult to draw any clear-cut line between "natural monopolies" and industries that can be and should be highly competitive. The class once considered "competitive" is now seen to include a variety of mixtures of monopolistic controls and competitive forces, and the force of substitute competition in the case of "natural monopolies" has attracted increasing attention. What once appeared to be a line has become an expanding zone. And there is a growing opinion that several different kinds of public control, rather than just two, should be fitted to several different kinds of industry or market.

Although extension of commission regulation to several major industries is often advocated, there has been for several years a growing realization among those familiar with public utility regulation that satisfactory and effective regulation is not nearly so easy to obtain as was once assumed. Of these critics some hold that satisfactory results would follow from changes in court interpretation of the due process clause, strengthening of the powers of commissions, enlargement of their budgets, and improvement in personnel. Others believe that commission regulation of private enterprise can never yield results as satisfactory as those of public monopoly.

In brief, the second set of objections to the "system" denies the realism and usefulness both of the twofold classification of industries and of the two-sided public policy adopted to fit that classification. The logic of this set of criticisms leads in the direction of extension of public control to more industries and development of a variety of different kinds of control to fit different kinds of industry or market situation.

Third, it is to be expected that the first two sets of criticisms of the earlier American policy would have grown substantially, if gradually, had there been no long and severe depression in the thirties. The third set of objections to that policy is peculiarly a product of the continuous existence year after year, beginning in 1929, of great unemployment of men, of equipment, and of savings. Policies of price inflexibility by big business are held by one school to have intensified

³ A few contend vigorously that restoration of effective competition and, in general, drastic diminution of economic power possessed by minority groups constitute the only safeguards against drift to a dictatorial totalitarian state. The most intelligent and forceful exposition of this view is contained in Henry Simons' pamphlet, *A Positive Program for Laissez-Faire*.

⁴ The best exposition of this view is contained in Arthur R. Burns, *The Decline of Competition* (New York, 1936).

depression and prevented recovery to full use of economic resources. Insofar as the power to control prices comes merely from the size of the large corporation in relation to the markets in which it sells, rather than from collusion with others, the antitrust laws as now interpreted are impotent as an instrument for attaining more price flexibility. The policies of regulatory authorities under the judicial rule of "fair return" on "fair value" resulted in a similar inflexibility of public utility rates.

The increased attention during the twenties to problems of the business cycle had not, indeed, entirely overlooked the possibility of relations between corporate price policies and industrial fluctuations. Theories of businessmen emphasized the beneficence of stabilization of individual prices, those of economists stressed the desirability of price flexibility. Neither set of ideas penetrated below a thin surface. As depression deepened in the thirties and the spread widened between rigid and flexible prices, discussion of this matter increased among economists.⁵ Most of the discussion, however, centered around the historical question whether prices are now less flexible than at some time in the past and the question of the reasons for price inflexibility. Unfortunately, there was little intensive, acute analysis of the consequences of inflexible prices, or to put it the other way around, of the question of what sorts of price policies would promote a larger use of the community's manpower, equipment, and savings. Programs to cure or overcome the assumed bad effects of price inflexibility range from proposals to restore effective competition in industry by dissolution of the large corporations to schemes for cooperation between industry and Government in bringing about expansion of output and employment and appropriate price adjustments.

To recognize that these programs rest on no secure foundation of acute analysis of the relations between price policies (or investment policies) and the level of employment of economic resources in the whole economy is not to deny the crucial importance of discovering what such relations actually are. The possibility that investment opportunities in the next generation will be substantially less than those in the nineteenth century, owing to the falling rate of population growth, the declining receptiveness of foreign markets, and the diminishing need for extension of railways and highways; the apparent impossibility of reaching the goal of full use of the country's economic resources through monetary policy and pump priming alone; and the attenuation of social and political attitudes consequent on the changing notion of democracy noted above, and on continuous unemployment here; as well as the effects of events abroad and our own domestic defense program of 1940—these things render it imperative to make a searching investigation of all possible means to increase the employment of economic resources and the national income. The critical question in the field of public control of industries is now: How, if at all, can public control of particular industries increase the total employment of men, equipment, and savings in the whole economy?

THE MAJOR ECONOMIC PROBLEMS

The broad problem of designing public policy with respect to control of industries consists of several parts. (1) A selection must be made between broad objectives—whether to emphasize improvement of

⁵ See *Price Behavior and Business Policy*, T. N. E. C. Monograph No. 1, Part I, Chapter II.

economic efficiency, (that is, the production of more goods more cheaply), alteration of the distribution of wealth and income, or more democracy in industrial ownership or control. (2) Criteria must be developed for distinguishing industries in which results under present circumstances fall short of desired objectives, and these criteria must be applied in detailed studies of all important industries. Such studies should ascertain actual results and compare them with desirable results. Very few such studies of particular industries have been made. (3) It must be discovered which, if any, of the various possible kinds of public control can be expected to bring results closer to the desirable objectives.

The purpose of the present report is twofold: First, to examine three instances of existing Government price control—those affecting electric utilities, milk, and coal—with respect to objectives, standards, control techniques, and actual or probable results; and, second, to indicate in exploratory fashion some of the possibilities with regard to the relative effectiveness of different kinds of control and different sorts of economic standards in achieving particular objectives.

Apart from the three regulated industries here surveyed no attempt can be made in this report to discover industries in which the situation is quite unsatisfactory and could be improved by extension of public control of one sort or another. That is, indeed, a task requiring the gathering of a great fund of factual information, as well as the formulation of more incisive and more concrete criteria for assessment of results than have yet been designed.

In this respect attention will be confined mainly to the economic aspects of objectives and standards. Although political and administrative aspects of control are of great significance, economic efficiency in the broadest sense and distribution of income must always be of considerable importance whatever broad public policy is embarked upon. Hence, in considerable measure, every instance of public control can be assessed according to its objectives, standards, and results in terms of efficiency and distribution of income.

In this report objectives, standards, and results are related to three major questions:

- (1) The height of the average price or average revenue and its relation to investment, output, utilization of capacity, consumption, costs, profits, wages, and employment in a particular industry;
- (2) The structure or pattern of prices charged to different classes of consumers and its relation to investment, output, utilization, consumption, costs, profits, wages, and employment in a particular industry; and
- (3) The relation of changes in prices and income in a particular industry to changes in the level of employment of men, equipment, and savings in the whole economy.

Objectives, if not always clear-cut standards, related to one or both of the first two problems have typically characterized public control of industry in this country. The antitrust laws were long supposed, at least by those versed in technical economics, by promoting competition, to have the indirect results of keeping prices and incomes in each industry down to the minimum levels required to evoke the services of labor, capital, and management. Thus, it was assumed

that under these laws competition would yield the maximum production of goods and services in each industry that were worth to consumers what they cost to produce. At the same time, competition would produce in the long run an allocation of labor and capital between industries in such a way as to yield maximum satisfaction of wants to consumers. Regulation of rates and earnings in railroads and other public utilities was directed partly at least to the same objectives. Price-fixing during the World War, on the other hand, was intended primarily to prevent profiteering and onerous increases in the cost of living, at the same time insuring adequate supplies for the armed forces. Some instances of Government control have had the purpose of raising incomes or maintaining prices at some desired level. Thus, the first set of objectives center around what may be called the problem of "high or low prices and incomes."

Public utility regulation has also been concerned with prevention or correction of "unfair" or uneconomic differences in rates to different consumers. This second problem always exists in every instance of price-fixing, whether or not definite objectives and standards are developed for it. It is obviously impossible to fix prices at all without deciding whether to charge uniform prices to all consumers in the same location, deciding what type of geographical price structure to set, and, where different grades or products are involved, what price differentials to adopt. The second problem may be referred to as the problem of the structure of prices.

It can be said almost without any qualification that, during the period 1870-1930, objectives and standards related to the first two problems were developed with no regard at all to the third problem, the relation between prices in one industry and the general level of use of economic resources in the whole economy. Although there were severe depressions in the seventies and in the nineties, the American economy seems to have operated most of the time during those 60 years at a high rate of use of its manpower and savings, if its equipment was not always so well utilized.⁶

Under present conditions the third problem—which may be called the problem of "prices and employment of resources"—is obviously by far the most important of the three. In many instances of public control of industries, however, objectives and standards continue to be related principally, if not always wholly, to the first two problems. The significance of this will be appreciated when it is realized, as will be shown later, that objectives and standards designed for the first two problems may, in a period of depression, adversely affect recovery to a higher level of use of economic resources in the whole economy. Moreover, as we have noted earlier, there has been little acute study of the third problem. Finally, there seems to exist much confusion about the relation between the full use of economic resources and the level of prices. Many persons seem to take it for granted that a price reduction in one industry will necessarily promote recovery by increasing production, employment, and consumption in that industry and hence raising total production, employment, and consumption in the whole economy by that much. They assume that there is no difference between the first problem and the third problem. This conclusion is reached by neglecting to consider the possible effects of

⁶ Various studies of capacity and its utilization in the twenties suggest that there was substantial under-utilization of capacity in that decade.

a price reduction in one industry on employment of economic resources in other industries. And this neglect is explained by the habit of concentrating attention entirely upon what happens in one industry—the balancing of producer and consumer interests in that industry—regardless of the possible effects in other industries. This habit of assuming tacitly that price changes in one industry would have no effect on the level of employment of economic resources outside that industry came into being in connection with the problem of the level of prices.⁷

Although intensive analysis of each of the three problems is deferred to later chapters, the differences between the questions associated with the level and the structure of prices on the one hand and the full use of economic resources on the other are important at the outset. The first problem concerns the balance of interests in a given industry between producers and consumers—or, more broadly, between management, investors, labor, and consumers—and also the allocation of capital and labor between industries, and questions of overinvestment and underinvestment. The second problem, the structure of prices, concerns the balance of interests between different groups of consumers of the products or services of a given industry; and also the degree of utilization of capital and labor, since some patterns of prices will result in larger consumption and production than other patterns.

Both the first and second problems are set, or conceived, on the assumption either that there will be full use of men and savings in the whole community, whatever is done in a given industry, or that what is done in this industry will not in any case affect the amount of employment of men, equipment, and savings in other industries. The whole point of the third problem, on the other hand, is the effect of a price change in one industry on the total employment of resources in the whole economy. This effect on the total economy of a price change in one industry is, of course, the algebraic sum of the effect on employment of resources inside and outside that industry. It may be positive, negative, or zero depending on the direction of price change and on the particular conditions at hand, as will be explained later.

The paramount importance of the problem of full use of resources does not signify that examination of the problems of price level and price structure can be dispensed with. The closer the approach to full use, the more important become the other two problems. It is imperative to appraise the objectives and standards used in treating the first two problems according to their effects on the level of use of economic resources. Finally, insofar as there exist or can be developed desirable objectives and standards and kinds of control for these two problems which exercise no adverse effect on recovery, it is important to apply them.

In the chapters which follow, these three major problems are taken up in order as they appear in Government price control in public utilities, milk, and bituminous coal. In the case of each of these problems there is presented, first, a sketch of the possible objectives

⁷ Actually it is a poor habit to use even on this problem. As economists have always realized, if resources are fully used, expansion of one industry would necessarily involve less use of resources in other industries. In practice there has ordinarily been enough slack, owing to growth of population and savings and some temporary unemployment, so that an industry might expand production substantially without making large inroads on the supplies of labor and capital needed elsewhere.

and standards for public control, a description of the actual objectives and standards adopted in these particular industries and, finally, a discussion of the results insofar as they could be measured. In the case of coal, where no prices had been fixed at the time of completion of the report of Messrs. Gordon and Webb,⁸ and in certain other cases only probable results can be indicated.

⁸ Prices became effective October 1, 1940. See footnote 5, p. 464.

CHAPTER II

THE LEVEL OF PRICES AND INCOMES—OBJECTIVES AND STANDARDS

There are many possible objectives of public control of the level of prices in a firm or industry ¹ of which six, and the standards associated with them, will be discussed.

One possible objective is to maintain or raise profits or wages (or both) by raising (or possibly, by lowering) the level of prices. Raising of income in a given industry, in turn, may be based on considerations of fairness and decency, on the mere possession by an organized group of sufficient power to compel Government aid in maintaining or increasing its income, or on considerations of economic efficiency from the standpoint of the whole community, as evidenced in the allocation and pricing of economic resources. Considerations of economic efficiency are discussed below; attention is directed here to raising or maintaining income for purposes other than efficiency. In passing, it may be noted that in a society where democratic representation takes the form largely of response to pressure groups, considerations of fairness to a particular group may command little attention unless that group has sufficient power to compel it.

Standards for maintaining or raising income for purposes other than economic efficiency are numerous. The top limit is, of course, the maximum income that can be obtained with existing conditions of demand. Other standards toward which policy is directed may be the absolute amount of dollar income received in some previous period; or the same relative amount of dollar income received in some previous period, that is, relative to income in some other industries—or a "normal" income derived by adjusting the absolute or relative income of a previous period for intervening changes, such as changes in price. Standards may also be put in terms of some parity, based on price relations and the purchasing power of goods in this industry and goods in other industries in a previous period—that is, the standard may be to restore a set of price relations between this product and other products, such that it enables the producer of this particular commodity to purchase the same quantity of some other things for every unit of his product sold as he could purchase in an earlier period. Again, the rate of income per week, month, or year received in some other industries might be made the standard.

Maintaining or raising the income in a given industry might be accomplished not only by Government price fixing in the industry in question, but also by fixing prices of competing substitutes at a higher level than would otherwise obtain. Here, also, apart from

¹ The level of prices as here used refers to the average price of all units or average gross sales revenue per unit; "income" to income of producers, or particular parts of producer income such as business profits and wages.

considerations of economic efficiency, the standards adopted for income in the industry to be benefited might be any of those mentioned above or a great variety of other alternatives.

The range of levels of prices that accord with some sort of standard related to considerations of fairness or justice will be narrower than the range of possible prices in the case of sheer use of power to extract the maximum income possible.

Whereas, the first objective sketched concerns the interests of producers alone, the five objectives which follow are all related in some measure at least, to considerations of economic efficiency from the standpoint of the consuming public. That is, they all represent variants or different interpretations of the basic notion of a balance of interests of consumers and producers, which represents an efficient use of existing capital and of the labor force, and an efficient distribution of new capital (and labor) between firms and industries.² Often also these objectives are designed to give to labor, investors, and management incomes no larger than sufficient to induce their services. They are thus inconsistent with the first objective, which, in essence, involves raising or maintaining income above the level appropriate to high economic efficiency from the standpoint of the whole community by the use of devices that often impair economic efficiency. They are, however, not inconsistent with raising or maintaining income of particular groups by devices that do not impair economic efficiency—for example, some kinds of subsidies.

A second objective, is to prevent excessive income, and at the same time indirectly to prevent under-investment and avoid encouragement of over-investment. In its simplest form this may be limited merely to the relations between income and investment of capital, ignoring the question whether the proper return to capital (or labor) might be secured at any one of two or more price levels. The extent to which capital and labor already in the industry are being fully utilized is also ignored or regarded as immaterial. The prevention by regulatory authorities of excessive income consistent with investment, taken by itself, is likely, in the absence of keen competition from substitutes, to result in high prices rather than low prices, for if the companies and labor can obtain good incomes without exploring the potentialities of lower prices they have little, if any, incentive to do so.

Standards for the prevention of excessive profits may be formulated in terms of percentage return on investment. The permissible percentage return may, for example, be derived from returns currently received in unregulated industries with similar risks. Standards for investment may be put in terms of actual dollars invested (or actual prudent investment), or of various types of reproduction or replacement cost of property, or of market value.

In the selection of a permissible rate of return and of the method of calculating investment, and in the actual process of changing prices or rates to eliminate or prevent excessive profits, the emphasis may be on protection of property rights or on preventing excessive charges to consumers. Where protection of property rights is a paramount

² The most efficient allocation of new capital and labor is that which most efficiently meets the freely expressed demands of consumers. The distribution of consumer purchases places valuations on capital and labor in different firms and in different industries. The most efficient allocation would exist only when there were no appreciable differences in what consumers pay for homogeneous units of labor and of capital in different firms and industries. If return per dollar of investment and/or per unit of labor of the same general ability is larger in one industry than in another, that signifies that consumers would prefer to have more of the product of the former industry and less of that of the latter.

objective, the authorities will endeavor to be sure that profits are equal to full returns permissible, and they will have a tendency to think of cost (including permissible returns) as setting a minimum for average price. They will also, no doubt, have a tendency to err in the direction of favoring investors. Where the emphasis is on protection of consumers, authorities have a tendency to think of cost (including permissible returns) as setting a maximum for average price, and they may err in favor of consumers. In practice, although the general objectives quite sincerely professed are the same—that is, to prevent excessive profits—there might be significant difference in the actual profits and prices according to the emphasis.

An alternative type of standard for this objective is the following: After defining and setting up an appropriate financial (that is, security) structure and rules for financial policy, prices would be regulated so as to keep the value of equity securities close to par, or so as to keep the earnings yield on the value of equity securities close to the earnings yield on similar securities in other industries.

The objective of preventing excessive profits may or may not be accompanied by the objective of preventing profits from falling much below a "normal" or "fair" return. That is, the purpose may be merely to forestall excessive profits by leaving the level of prices and income free to fall below a legal maximum according to management policies and competitive forces, or public control may also assume the responsibility for preventing "ruinous" competition. In the latter event the standards for minimum prices and profits may be the same as those sketched above for maximum prices and profits; or they may be the same kind of standards with lower rates of return if it is thought that somewhat lower profits for a time will not impair service and financial soundness and may be more effective in stimulating elimination of over-investment.

In an industry in which many firms are operating, the standards discussed above can be applied only with some further standard for determining which firms, if any, are not to be allowed the permissible profit. This involves distinguishing a marginal firm or firms and relating the standard of pricing to it or to them. The marginal firm may be conceived as one whose costs are about the average of most of the firms in the industry. Or a "bulk line" standard may be used, particularly where the costs of most of the firms differ but little and a few exhibit much higher costs. In this case, the highest-cost firm or group of firms among the bulk of the firms would be selected as the marginal one whose returns would be used as a basis for setting prices. Or a more sophisticated standard might be employed, according to which the marginal firm is the highest-cost firm whose output is just needed to fill all the demand at an average price equal to its cost including the permissible profits.

Standards relating to labor income may also be involved in public control of prices. Here, also, the purpose might be merely to prevent excessive income to labor, or, more frequently, to keeping income up close to the permissible level. In determining the amount of labor income standards could be formulated in terms of previous wages in the industry, wages of similar kinds of labor in other industries, changes in the cost of living, etc., and be stated in terms of weekly, monthly, or yearly earnings.

A third objective is maximum production and consumption. At any given time this means maximum possible utilization of existing equipment and labor in the industry. It also means that there should be invested in the industry the maximum amount of capital (and labor) that will show expectations of income no less than they could receive elsewhere. Under this standard, the appropriate basis for pricing at any given time, or in any short period is the amount of expense directly involved in production and sale of an additional group of orders. Technically, this is called "marginal" or "incremental"³ cost.³

The maximum possible output of a firm will be obtained under this standard only when price is equal to incremental cost. At any higher price, presumably somewhat less of the product will be taken by consumers; at any lower price the firm will reduce its output because price does not cover the amount of additional expense which it must incur to produce the last additional run of production, with the result that continuance of production at that level would mean smaller profits than can be obtained by reducing output to the point where the price once more covers the incremental cost.⁴ Unless capacity is already fully utilized incremental cost includes no overhead, because this additional production does not add to the aggregate of overhead expense.

This objective of maximum output and consumption may be pursued by making price equal to incremental cost at all times, without regard for changes in the amount of investment or capacity in the industry. But in an industry where demand is continuously growing, rigid application of such a standard might, under certain conditions, prevent maximum economic investment and output in the long run. Regard for a continuing maximum output calls for short-run prices that will maintain expectations of profit sufficient to attract additional investment as demand grows. If prices equal at all times to incremental costs will not provide such profits, then prices, by this standard, should be higher by just enough to accomplish this end.

An important difference between the objective of maximum production and consumption and the objective of merely preventing excess profits and ensuring permissible profits is that the former calls for the lowest level of prices consistent with continuous provision of satisfactory service in the amounts demanded. If there are two or three levels of price at which permissible profits (but no more) can be earned, the objective of merely preventing excess profits is not likely to lead to the lowest of these price levels. There may also be another difference of great importance. In practice, those who think merely of eliminating excess profits are likely to think of a permissible return as receipt of a certain percentage on total past investment in every year, or on the average through good years and bad. On the other hand, those who aim at maximum output or utilization of past investment are more likely to realize that in order to obtain a continuous inflow of new capital it is only necessary to

³ The cost of an additional increment may be defined as the difference between the aggregate expense of all kinds when that increment is produced and the aggregate expense when that increment is not produced. In many cases incremental cost approximates out-of-pocket expense. Where equipment depreciates mainly according to the amount of use, however, incremental cost includes depreciation expense whether or not it is actually paid out.

⁴ Since wages make up a part, often the larger part, of incremental cost, the question arises of a short-run standard for wages. Maximum efficiency from the standpoint of consumers calls for wages low enough to employ all the labor committed to this industry in the sense that it cannot get or will not take employment elsewhere. In some cases such a wage would be so low as to conflict with other objectives desired by most of the country, or so low as to impair the health and morale of the workmen and their families.

maintain satisfactory expectations of future profits on new investment. Thus, this does not necessarily mean that past dollar investment needs to receive year after year, in depression and prosperity, a "normal" return, even though there occur changes in technology, bringing obsolescence, shifts in location, rise of new substitutes or other fundamental changes. Pursuit of the objective of maximum consumption requires changes in prices and in profits to adjust to changing economic conditions. Only by continuous adjustment is it possible to obtain maximum consumption consistent with maintenance of minimum profit expectations sufficient to attract additional capital.

The fourth objective concerns maximum output and diminution of investment. When excess capacity exists and demand is stationary or contracting, the objective from the standpoint of efficiency is maximum output and gradual elimination of excess capacity as it wears out. The standard for this objective is price equal to incremental cost at all times. Since expansion of investment would represent waste, there is no reason from the standpoint of efficiency to keep price above increment cost unless that is necessary in order to obtain capital for modernization of equipment in order to reduce cost.

As explained above⁵ the amount of increment cost depends in considerable degree on wage rates. In a stationary or declining industry it is probable that there will be excess labor capacity as well as excess equipment. Consumers as a whole will be benefited by transfer of some workmen, if this is possible, and in any case transfer of their children to other industries. One method facilitating such transfers is the maintenance of wage differentials between the industry in question and other industries in order to make transfer attractive. Other means can, of course, be devised.

A fifth possible objective—although it is not illustrated in this report—is maintenance of more investment and output than the amounts required for maximum economic consumption (the third objective described above). This means carrying investment beyond the point where it is expected to yield ordinarily good earnings. Examples are the maintenance of certain non-paying branch railroad or electric lines in the interests of public service, low-cost housing under certain circumstances, hospitals, and schools, etc. Standards for the amount of investment related to this objective are usually vague, or else they reflect merely the limitations on the sums that can actually be obtained for such purposes. It is not, however, impossible to work out rough criteria for approximate limits.

The similarity in one respect between this objective and the first objective described—maintaining or raising income—should not be overlooked. Pleas for Government aid to raise income usually signify the existence of over-investment judged by current yields. If this over-investment is perpetuated by Government assistance to private producers, Government is, in fact, doing essentially the same thing as far as investment is concerned as it or private charities do in the case of schools and hospitals. The difference between the two objectives is, of course, that in the former the aim is to benefit producing groups, and in the latter case to benefit consumer groups; as, for example, by low-cost housing.

⁵ See footnote 4, p. 414.

The sixth and last objective is to increase the efficiency of technological methods and equipment, of administration, of labor, and of marketing. This objective can be pursued in connection with any of those already discussed. Standards may be of two sorts: prices may be related to costs based on certain standards of efficiency in performance, or a sliding scale may be used according to which the savings from improved efficiency are shared between producers and consumers.

The use—or absence of use—of these objectives in the actual regulation of electric utility rates and prices of milk and of bituminous coal are discussed in that order in the following chapter. This discussion is based upon the findings contained in the special monographs presented in parts I, II, and III of this volume.

CHAPTER III

THE LEVEL OF PRICES AND INCOMES IN ELECTRIC UTILITIES

In regulation of the general level of rates of an electric utility the principal aim has been, as a rule, to ensure that consumers are not forced to pay extortionate rates and that there is a "fair return" on invested capital. This is, then, broadly the second objective discussed in the previous chapter. In carrying out their objectives, regulatory commissions have been severely handicapped in their administration both by court decisions and by statutes. Forty years ago the Supreme Court laid down the broad rule that rates must yield a "fair return on the fair value" of the property of a public utility company. This rule does not seem to be suited to developing economic standards for rates that will result in the maximum possible consumption of electricity consistent with insuring sufficient income from the investment to attract capital as demand expands and additional equipment is needed. Legislatures have refrained from amending utility statutes so as to permit and encourage development of such standards, and commissions have not taken this task upon themselves, doubtless partly because of the fear of court reversal.

Partly as a result of the need for adhering to this rule, commissions have not developed definite economic standards for the promotion of maximum economic consumption. The three commissions studied in part I—Wisconsin, New York, and Illinois—which are among the most effective in the country,¹ have evidently endeavored to set rates so as to yield an ordinary or normal return on actual prudent dollar investment. In this the commissions of Wisconsin and New York have made great progress in the past decade through the development of accounting records and the process of routine checking of rates of return and by the ordering of rate reductions whenever the results for a given year show returns above the rate (usually 6 percent) considered normal. In Wisconsin and Illinois the commissions have made use of the so-called "objective rate" as a device to test out the elasticity of consumption at lower rates and thus provide an indication of the profitability or unprofitability of a reduction in the general level of rates.

Two aspects of the process of rate reduction by these commissions suggest, however, that as a rule rates are not at the lowest level which would barely yield ordinary returns on actual investment. First, rates are not reduced until after excess annual earnings have appeared. Second, in estimating the amount of reduction that will remove the excess increment of earnings, the commissions typically base their calculations on the existing or past volume of consumption.

¹ This is not to imply that the work of certain other State commissions is of any lower order than that of the 3 chosen as a sample of the few best.

They evidently believe that estimates of probable consumption at lower rate levels would not be regarded by the courts as conforming to law.

The standard which these commissions have come to implement quite effectively contains, however, some confusion between the problem of fairness to past investments and the problem of obtaining maximum economic consumption. It cannot satisfactorily solve both problems together, and it is not well suited to treatment of the second problem in a dynamic economy characterized by progress and obsolescence, shifts in population and industrial location, and broad changes in price levels.

LEGISLATIVE OBJECTIVES AND STANDARDS

The public utility statutes of Wisconsin, New York, and Illinois have the general objectives of ensuring adequate service at reasonable and just charges. No definite standards are provided in the laws, except with reference to temporary rates. Commissions are empowered to disapprove rates filed and to set reasonable rates. They are provided with powers to prescribe forms of accounts and to control security issues, but no standards concerning the relation of accounting practices and security structures to rates and earnings are laid down in the laws.

ADMINISTRATIVE OBJECTIVES AND STANDARDS

It appears that all three commissions have pursued similar objectives with regard to the general level of rates. In terms of the classification of objectives given above the major aim of these commissions seems to have been elimination of excess profits. They have indeed, evidenced a desire to achieve increased consumption, especially in the last few years, but it does not appear that they have attempted to secure maximum consumption as that has been defined above.

All three commissions seem mainly concerned with securing rate reductions that tend to eliminate profits in excess of an ordinary return (about 6-7 percent in the last few years) on actual dollar investment, that is, original cost of property "used and useful" less depreciation.² No real attempt seems to have been made to reduce profits below an ordinary or "fair" return in poor years with the assurance of profits above an ordinary return in good years. In general the endeavor is not to set rates that, given current costs and probable consumption, will prevent receipt of excess profits, but rather to obtain rate reductions tending to eliminate excess profits soon after they appear. The typical process is to reduce rates to a level at which, assuming the same consumption as in recent years, profits would be about equal to the ordinary return on actual dollar investment. The Wisconsin and New York Commissions have raised this process to a high level of efficiency through development of original-cost accounting to make book values correspond to actual dollar investment and through continuous checking of annual reports accompanied by negotiation or inauguration of proceedings in instances where reported earnings appreciably exceed the ordinary return in any

² They do not, however, take the position that fair value and actual investment are always synonymous.

year.³ It is obvious, however, that when costs are declining, because expanding demand gives fuller utilization of equipment or because wage rates or material prices are falling, this process enables the utilities to receive more than the ordinary return in each year. On the one hand this gives utility managements (insofar as they wish to make larger profits for their corporations) some incentive to raise efficiency and to stimulate consumption. On the other hand the failure of the commissions to study intensively the probable effect of lower rates on volume of consumption and to allow for this in estimating effects of rate reductions on income may prevent discovery of the lowest rates which would yield the ordinary return (or the ordinary return plus something more for 1 year) on actual dollar investment. Rates may remain considerably above both of these levels.

The Wisconsin commission in 1935 required most of the electric utilities under its jurisdiction to institute objective rates.⁴ This was adopted as an experiment to test the effect of lower rates on consumption and profits without any possibility of impairing the existing legal earnings of the utilities. It was also regarded as a transitional device to obtain lower regular rates. Since profits have remained "fair" in the years subsequent to initiation of the scheme, the objective rates are now being eliminated in favor of lower regular schedules. The Illinois commission also favors the use of objective rates as a method of transition to a lower regular level of rates. The New York commission has been opposed to objective rates on the ground that they involve discrimination between customers purchasing the same quantity of electricity. It has, however, vigorously sought to obtain lower levels of rates during the past several years, and in particular during the course of the depression.

In general it appears that these commissions did not make energetic attempts to discover the lowest level of rates at which ordinary profits, according to their conception, could be obtained, until after the advent of depression influences. The striking effects of low T. V. A. rates on consumption, manifested a few years later, were partly a result of ideas contributed by those associated with the Wisconsin and New York commissions on the one hand, and a cause of redoubled activity on the part of the commissions to secure rate reductions on the other. The efforts of all three commissions in this direction have been intensified in the last 5 years, but they do not yet make extensive use, in fixing rates, of data on potential consumption at lower rates. It is their belief that courts would not regard such considerations as permissible in fixing rates. There is, however, some reason to think that the commissions may be wrong in this opinion. In the *West Ohio Gas Company case*,⁵ the Supreme Court appears to have implied that commissions are not debarred, in fixing rates, from giving weight to data on the relation between lower rates and expansion of consumption, provided the data are reliable.⁶

³ In the case of New York this is mainly a development of the last 10 years. During the twenties the New York Commission tended to be merely a court to consider complaints rather than an administrative agency engaged in energetic control on its own initiative. See Report of the New York State Commission on the Revision of the Public Service Commission Laws, I, p. 14.

⁴ An objective rate, of which there are several types, is a charge below the standard rates which applies to consumption in excess of that in a previous period taken as the base. Objective rates have been voluntarily inaugurated by some utilities in various parts of the country.

⁵ 294 U. S. 79 (1935).

⁶ See Ben W. Lewis, p. 720, *Government and Economic Life*, Brookings Institution.

Although the ideal of these three commissions is apparently to fix rates so as to eliminate profits in excess of an ordinary return on actual dollar investment, they can, of course, achieve this goal only if the utilities are willing to forego their legal right to a fair return on a fair valuation in the determination of which some weight is given to reproduction cost (except when the latter is lower than original cost). Wherever court proceedings are threatened the commissions must make valuations which usually represent a hybrid of original cost and reproduction cost. Moreover, it is probable that the commissions must often be somewhat generous in order to avoid court appeals, both when reductions are secured by informal negotiation and when formal cases are settled without appeal to the courts.⁷

In determining an ordinary or fair rate of return the three commissions take into account elements which have come to be typically considered by most commissions in the light of Supreme Court decisions. The return must be at least equal to the return being currently received by other business enterprises with comparable risks. It should be such as to maintain the utility's credit and to enable the company to raise whatever new capital it needs. Factual studies are often made of the rate of return in other enterprises. Inasmuch as the commissions do not often have figures of original cost of assets of other enterprises comparable to their figures for the utilities, to say nothing of "fair values" of the properties of other enterprises, it is obviously difficult to determine the appropriate rate of return. Rates of return allowed may have averaged somewhat higher than the true comparable rates. In general the commissions have not stated whether maintaining the credit of utilities means maintenance of ability to sell securities at all, to sell securities at par or at some other particular price, or to sell them on certain yield expectancies. The New York commission seems to favor sale at par. Nor have these commissions developed any definite standards by which to determine whether too much or too little capital was entering utilities. Although they have, of course, shown awareness of the general relations between rates, earnings, credit, and security structures, it does not appear that they have developed standards for designing ideal security structures from the standpoint of the broad aims of control of rates, earnings, and service.

It is obvious that the level of rates may be substantially influenced by the level of operating expenses when a cost basis is used for establishing the rate level. The commissions have devoted some attention to the problem of allowable operating expenses. In New York and Wisconsin standards for proper depreciation have been carefully worked out. With regard to depreciation, maintenance, service charges paid to parent companies, and the like, the Wisconsin commission seems to take the position that the utilities are entitled to

⁷ This situation is well illustrated by the experience of the Massachusetts commission which has successfully avoided litigation although it has always fixed rates according to standards in terms of return on carefully controlled security structures, without making property valuations. It appears that the Massachusetts utilities have been permitted to earn liberal returns. The California commission, which has been one of the most vigorous advocates of the original cost rate base, has on the whole been quite successful in avoiding litigation. This result may be partly ascribed to the fact that much of the equipment of many California utilities was installed during or after the World War, with the result that the gap between original cost and reproduction cost was not as large during the twenties as in many other cases. But it also appears that the California commission has permitted rather generous returns. See D. F. Pegrum, *Rate Theories and the California Railroad Commission*, Berkeley, 1931. That the New York commission has followed the same policy seems indicated by several cases cited in Part I of this report. See, for example, *Re Electric Rates*, New York City and Suburban Territory, 1933 Annual Report, p. 391; *Utica Gas and Electric Co.*, 1931 Annual Report, pp. 208, 235-240; *Investigation, Rates of Long Island Lighting Co.*, 1935 Annual Report, p. 788.

recover only such expenses as would be incurred if vigorous competition were present. What this means concretely is none too clear. Apparently it does not mean that allowable operating expenses are defined as what the operating expenses would be with the use of the most efficient known techniques, which would, of course, be the standard for maximum efficiency. Evidently the general aim is to disallow as operating expenses those expenditures that represent betterments or extensions, rather than maintenance and depreciation, and controlled service charges in excess of the costs of rendering the services and increments of expenditure on other items whose only explanation resides in monopolistic controls of one sort or another.

It appears that the commissions do not regard it as any part of their function to pass on the validity of wage rates.⁸ There is every reason to think that an increase in operating expenses resulting from an increase in wage rates would be regarded as allowable and would lead automatically to an increase in the rate level if this were necessary in order to preserve receipt of the fair return.

The restrained advocacy and tendency to prudent use, in setting the rate level, of the standard of ordinary or fair return on actual dollar investment represents the belief common to these three commissions, among others, that this method is the most workable and efficacious of the rate base methods, and is eminently fair to investors since it gives them a return on their actual investment that is currently equal at least to what they would have received from investment in comparable unregulated enterprises. Belief in the desirability of this standard must also reflect the conviction that it provides adequate protection of consumers, for these commissions undoubtedly consider their main function to be protection of consumers from exploitation through high rates.

This standard does not, however, reflect adoption by the commissions of the objective of maximum economic consumption as that is conceived in the classification of objectives given above. It is to be doubted that the commissions have even discovered the lowest rate levels that would yield an ordinary return on actual dollar investment. Although they have recently devoted more attention to this matter they have not set rates on the basis of intensive study of the potentialities of increased consumption at lower rates; and the law up to the present time probably prohibits them from requiring utilities to experiment with lower rates, except by the device of the objective rate.

However, even if the lowest rates consistent with the standard of ordinary return on actual investment were in effect, in many circumstances they would not yield maximum economic consumption. It is true indeed that a very sophisticated and skillful handling of this standard might produce maximum consumption; but the very essence of the notion of ordinary return on actual dollar investment is such as to preclude any likelihood of such employment of it. The idea of an ordinary return in each year on past investment is taken from simple static economics describing a situation in which there is no appreciable technical progress, no marked shifts in demand, no significant changes in price levels or in other important dynamic

⁸ Under the ruling in *Wolff Packing Co. v. Court of Industrial Relations of the State of Kansas*, (262 U. S. 522, 1923) it appears that the States have no constitutional power to fix wages even in public utility industries. Whether commissions in setting rates have legal authority to disallow some part of the wages bill as unnecessarily high is not clear.

influences such as are constantly at work in the real world—a situation in which price is always equal to cost including an ordinary return on actual dollar investment. Although it is repeatedly averred that public utility regulation does not guarantee receipt of an ordinary return, this standard implies very strongly that commissions will not knowingly set rates below the lowest level that will yield, in addition to adequate depreciation, the ordinary return on original cost of property or actual investment. The notion is well stated in the following:

* * * the earnings of the public service property should be such that, within the life of the property, there will be returned to the owner of the property the capital which he has properly invested in it, and, in addition thereto, interest at a reasonable rate upon such amount of capital as from time to time actually and properly remains as an investment in the property.⁹

This tends strongly in the direction of removal of risks of obsolescence, changing price levels, and shifts in demand, insofar as they can be removed. And although the ordinary return is conceived as fluctuating from time to time,¹⁰ it is not usually thought of by advocates of fair return on original cost as ever going down to zero on any part of the capital that is not completely and obviously obsolescent. In practice the fair return varies but little. Rates of return used most frequently by commissions and courts were 6 to 7 percent in pre-war years, 7 to 8 percent in the twenties with 7 percent most common, and 5 to 7 percent in the depression of the thirties.¹¹

Now it is highly doubtful that all or nearly all of the actual dollar investment in even the less risky unregulated industries, those that may be comparable to public utilities, has in fact received such a "fair" return over an extended period of years. Yet experience indicates that these industries have been able to attract sufficient capital to meet increasing demands.

In practice, use of the standard of ordinary return on actual dollar investment in utility property is most likely to give rate levels higher than would be necessary to maintain expectations of sufficient profit on new investment to attract capital as demand expands. In depression periods the fair rate of return may not be reduced as much as the actual rate or return in comparable unregulated industries, while in prosperity the rate might not be held below that in unregulated enterprises; since otherwise difficulties would appear in the raising of new capital, and company protests would be vigorous.

More important, perhaps, is the possibility that book values of corporations in unregulated industries, even in the less risky ones, undergo more downward revisions to reflect partial obsolescence¹² than are made by commissions in the original cost rate bases of utilities. If this is so it follows that when commissions select a rate of return by examination of rates of return on book value of property of unregulated enterprises and apply this rate of return to original cost rate bases of utilities they may be giving the utilities a higher rate of

⁹ Grunsky, C. E., *Valuation, Depreciation and the Rate Base*, New York, 1917. Quoted in G. L. Wilson, J. M. Herring, and R. B. Eutsler, *Public Utility Regulation*, New York, 1938, p. 164.

¹⁰ The rate is not always regarded as fluctuating. In the period of high interest rates following the war the Illinois and Indiana commissions continued to use the pre-war standard rate (7-7.5 percent in the case of Illinois) as a "normal rate." Bernstein, *op. cit.*, p. 93.

¹¹ *Ibid.*, *passim*.

¹² This may occur through unnecessarily large charges to depreciation instead of write downs of fixed assets. Unregulated companies do not have the same incentive as regulated utilities to make accrued depreciation as small as possible.

return than the other enterprises actually received on original dollar investment.

Again, it is obvious that in a period during which general prices are considerably lower than formerly, rates that give an ordinary return on the whole dollar investment in a utility may be higher than necessary to make new investment attractive and to maintain the company's credit. This does not mean that a cost of reproduction rate base for the whole of the property would be more satisfactory. Clearly it would not, for it would ruin the credit of all companies which had substantial amounts of bonds. If bonds are to be used in large amounts in utility financing, on the grounds that debt capital is cheaper and that insurance companies and savings banks are thus furnished with approved investments, the expectations so created should not be drastically impaired throughout the whole industry just because the price level drops substantially. Neither an ordinary return on an original cost rate base nor on a reproduction cost rate base, applied to the whole of the investment, will give maximum economic consumption with changing price levels. And neither type of rate base in itself takes account of technological improvements, shifts in demand, or changes in investors' fashions in securities. In other words, no simple formula of rate of return on an investment rate base is capable of achieving thoroughly satisfactory results.

In summary, application of the notion of an ordinary return on actual dollar investment in utility property "used and useful," which is espoused by the best of the State utility commissions and by the majority of writers on this subject, is not likely to result in maximum economic consumption of utility services. Except in periods when the general price level has risen markedly it is likely to give larger returns to past investment in equity capital than are needed to assure a flow of the net savings into utilities on yield expectancies comparable to those exhibited by enterprises competing with the utilities for capital. In periods when general prices have risen substantially it may keep returns below the level for unregulated industries, but this is not likely to be prolonged because inadequate returns by this standard are quickly recognizable and the companies will protest vigorously.

LEGAL LIMITATIONS

As already indicated, the administrative commissions in the public utility field have been hampered seriously by the attitude and decisions of the courts and by the failure of the legislatures to define policy clearly.

By its interpretation of the fourteenth amendment, which prohibits the taking of property without "due process" of law, the Supreme Court has made it impossible for State commissions to pursue the objective of maximum economic consumption in either the case of expanding or of declining demand. According to this interpretation, public regulation may not deprive a utility of any part of a fair return on the fair present value of its property investment.

The rule that the utility is entitled to a fair return on the present or current value of its property emphasizes the Court's concern for fair treatment of past investments. Fairness to vested interests rather than economic efficiency is the heart of the legal doctrine of

fair present value. The Court's rule requires determination at every time of what is then currently fair to the whole of the past investment.

Since the doctrine which the Court has enunciated is a doctrine of fair treatment of past investment which inevitably seems to involve the idea that utility investment is entitled under almost all circumstances to as much as it would have received in ordinarily flourishing unregulated industries of similar risk, commissions are almost entirely prevented from seeking the objective of maximum consumption. Elimination of excess profits above the "fair return" is not unfair to past investors, but reduction of rates by commission order which at any time brings earnings below a fair return on all existing investment is likely to be regarded as illegal even though demand has dropped, obsolete equipment has not been modernized, or locational elements have changed.

As a result, the commissions encounter difficulties in lowering rates to conform with changes in technology or declines in demand, when fair return would be impaired thereby, unless changes have been very striking. Moreover, the courts tend to view actual cost with existing rate of operations, including the fair return, as the minimum basis for the average rate. Inauguration of lower rates on the presumption that sales volume will expand sufficiently to bring in the fair return at a lower average rate and lower average unit cost tends to be regarded as the function of management rather than of regulatory authorities—especially since the utility is entitled to the fair return in each year and consumption may increase sufficiently only over 2 or 3 years.

The court seems to have taken the position that a public authority may not deprive the utility of a fair return on fair value at any given time or in any short period of time, such as the ordinary accounting period of 1 year. The utility seems to be legally entitled in any given year to whatever rates will give it a fair return in that year, but not to higher rates; without regard to past deficits or surpluses in relation to a fair return.¹³ However, neither commissions nor legislatures have clearly and forcefully presented a program designed to give an average fair return over a period of years, with less than this in some years and more in others. Apparently the Court has not definitely forbidden a legislature or commission to adopt a long-run program of averaging returns; and the success of "temporary rate" statutes in the courts suggests that such a program, if instituted, would be sustained.

Not only does the philosophy of the legal doctrine limit commissions in the main to the objective of merely preventing excess profits; the application of the rule of fair return on fair value requires such an enormous expenditure of their resources in determining valuations that they have little time and money to devote to study of demand, consumption, incremental costs, and obsolescence—that is, to the elements that would be important in developing standards for the objective of maximum consumption.¹⁴

¹³ Attempts have been made to maintain that the rate level may not be higher than the "value of the service" even though a fair return is not gained. In general the Court has not acceded to this request to regard "value of service" as a superior standard. However, it will not, of course, insist on an amount of revenue that patently cannot be earned with existing demand conditions.

¹⁴ Trenchant criticisms of courts, commissions and utility managements for preoccupation with legalistic conceptions and unsound economics and for failure to develop rules, standards and policies for designing rates that tend toward maximum consumption are contained in M. G. de Chazeau "The Nature of the 'Rate Base' in the Regulation of Public Utilities," *Quarterly Journal of Economics*, LI, 303 ff. February, 1937; C. O. Ruggles, "The Role of Rate Making," *Harvard Business Review*, Winter, 1940; and Ben W. Lewis, in Part I of this report and in *Government and Economic Life*, The Brookings Institution, 1940, ch. XXI.

Two aspects of the courts' applications of the fair value doctrine have greatly complicated the work of commissions in pursuing the objective of preventing excess profits, have impaired the effectiveness of their work and greatly, and possibly unnecessarily, augmented their expenditures. The courts have persistently refused to lay down any standard for determining present value, but have insisted that both actual dollar investment and cost of reproduction of the property must be obtained and given consideration along with other elements. And they have maintained (quite logically, on their view of the matter) that only the courts could determine in the last analysis whether a given valuation was fair or not. Such a position has naturally provoked a great deal of litigation and volumes of debate on the respective merits of various standards of valuation. The "valuation" which the court has had in mind is neither value nor cost nor anything else which has a definite existence in objective facts, but represents an ideal of fair treatment of the owners of past investment which can be made concrete in a given case only by examination of the facts and exercise of judgment as to what is fair. Consequently, it is scarcely surprising that the controversy about a formula for valuations has never been settled.

In the second place the courts have held steadfastly to their view of utility investment as a homogeneous lump of property or assets. This has resulted in failure to recognize the difference in claims to income on the part of holders of different types of securities. With an increase in the general price level in line with rising returns in other industries, fair treatment of stockholders might require an increase in earnings and dividends per share, but this is not the case with holders of bonds or preferred stocks bearing a maximum income limitation. Similarly, with a decline in the price level the actual terms on which capital has been invested are of significance.¹⁵

However, recognition of the fact that the present value doctrine practically limits the objective of regulation to prevention of excess profits (that is, the first objective discussed above) is much more important than appreciation of the difficulties concerning standards of valuation which have confused the pursuit of this objective. It will be impossible for public authority effectively to pursue the objective of maximum consumption consistent with profit expectations sufficient to attract needed capital until the whole notion of fair return on present value is scrapped—except for its application during a transition period to the old investment made prior to announcement of the new rules. It should be repeated that legislatures have refrained from energetic attempts to convince the Court that this doctrine represented bad economics and more protection for investors than is necessary to secure capital.

¹⁵ From time to time some commissions have used as a criterion for fixing rate levels the provision of income sufficient to pay fixed charges and ordinary or fair dividends on stocks. The Massachusetts commission, which has had continuous control over security structures of utility companies, has employed this standard for several decades. Other commissions adopted it, at least in part, for a time during the price inflation of the years 1916-20. In the depression of the thirties the New York and Wisconsin commissions endeavored in some instances to set rates that would provide, after payment of fixed charges, merely enough income for ordinary dividends and reserves. But except in Massachusetts this seems to have been regarded as an emergency device, and most commissions held to the method of fair return on fair value. Although the Supreme Court veered in the *Chicago Telephone case* (*Lindheimer v. Illinois Bell Telephone Co.*, 292 U. S. 151) toward acceptance of criteria related to the financial needs as evidenced in actual or reasonable capital structures, it seems since to have reverted to its traditional position. See Bernstein, *op. cit.*, pp. 37 ff. and 115 ff.; and J. M. Clark, *Social Control of Business* (New York, 1939), pp. 317-318; and Part I of this report. Commissions frequently say that they take capital structures into account in fixing the fair rate of return. It is obviously difficult to determine how and to what extent this is done, unless the commission explains clearly.

However, it is by no means certain that the court would hold invalid a program consisting of the following parts: (1) A fair valuation of past investment made on expectations that will now be altered by public authority, and assurance of a fair return on this valuation for the life of that investment (provided it can be earned at some rate level); and (2) announcement that henceforth the objective will be maximum consumption consistent with receipt of profits on investment made subsequent to the date of announcement¹⁶—merely sufficient to maintain expectations that will attract capital if demand expands.¹⁷ Definite announcement of the objective and the relevant standards would ordinarily constitute fair treatment of future investors. With a division of the problem to distinguish between fair treatment of past investment made before public adoption of a new objective and treatment of additional investment according to objectives and standards related to economic efficiency, the present value doctrine, as it has been enunciated, would be applicable only to the first part of the problem.

Recognition that the Court has not on its own initiative divided the problem in this way should be attended by recognition that the Court would probably consider such action as no part of its judicial function. Secondly, it does not appear that the Court has been asked by commissions to pass on such a program, clearly delineated and forcefully presented. Finally, legislatures, by their failure to enact statutes directing commissions to adopt such a program, have neglected what is clearly their function, whether or not it be considered in part the function of the court or of commissions.

Consequently, if they desire commissions to aim at maximum consumption, legislatures should pass statutes providing for a final valuation of past investments in utilities (a valuation to end all valuations) and for a fair return on that valuation for the life of the investment, and at the same time announce a new policy for the treatment of future investment and standards appropriate thereto. It is possible that the Court might regard legislative establishment of new rules for treatment of future investment as constitutional. Whether it would accept a final settlement of fairness to past investments is, perhaps, more questionable. In any event, such a program does seem to afford a possible means of gradually approaching the goal of maximum economic consumption.

RESULTS

There are no available factual studies summarizing the results of public regulation of electricity in these three States in terms of the relations between investment, rates, wages, and profits. It was found impossible to make such studies within the limits of the present inquiry. However, some general conclusions are evident.

During the twenties, there was a tendency to fix rates so as not to yield less than 7 to 8 percent on valuations reflecting in increasing

^{16, 16} That is, profits in addition to the amount necessary for a fair return to investment made prior to adoption of this new objective.

¹⁷ Differentiation in treatment of investment made before and after imposition of regulation or fundamental change in the rules of regulation has been advocated by many writers. See, for example, M. G. Claeser, *Outlines of Public Utility Economics*. Several proposals have been made that the States make contracts with utilities according to which present valuation would be made at the time of the contract and new rules for future rate making laid down. See, for example, Report of New York Commission on Revision of the Public Service Commission Laws, I, pp. 16 ff. and 334 ff.; and E. M. Bernstein, *Public Utility Rate Making*.

measure the current cost of production. It is scarcely to be doubted that the profits of many electric, gas, and telephone utilities were generous to a point of being appreciably above an ordinary return on actual dollar investment and still further above the minimum necessary to attract capital for expansion.¹⁸ Some evidence of this is afforded by the scramble between utility managements, promoters, and banking or engineering firms to acquire operating companies, and the capitalizations of holding companies. The avid public purchase of utility holding company securities may be taken partly as an indication that current levels of utility earnings attracted more capital toward the utilities than they desired to use in actual expansion of equipment, for it seems evident that a considerable amount of the additional investment in holding company securities did not go into equipment but found its way into higher prices paid owners of previously issued utility securities or into the pockets of the working capital accounts of promoters and bankers. Data submitted in the *Wisconsin Statewide Telephone case* suggested that Wisconsin public utility companies had received in the latter twenties returns on net worth or common stock equity which compared quite favorably with those received by Wisconsin industrial enterprises. The New York commission found that several utility companies serving New York City had accumulated large surpluses during the twenties, which, together with their depression earnings, enabled them to maintain very good dividends in the depression. Many unregulated enterprises must have envied this record.

During the downswing of the early thirties utility rates fell much less than the prices of most commodities and utility profits held up better than those of most industrial enterprises. Beginning about 1932, rates seem to have been gradually reduced in such measure as to bring earnings much closer to a return of about 6 percent on actual investment than in the twenties.

This has come about under a variety of influences, chief among which have been depression, new legislation, more extensive control of accounting, and more vigorous and continuous procedures on the part of commissions to secure rate reductions, the fall in cost of reproduction, and the impact of T. V. A. policies and experience. Some of the same tendencies have probably been present in some measure in most of the States that have less effective regulation than the three here studied.

THE TENNESSEE VALLEY AUTHORITY

The objective of Congress with regard to the level of prices of electricity produced by T. V. A.¹⁹ appears to be quite similar to that considered advisable by the commissions in Wisconsin, Illinois, and New York—a level of rates yielding revenues that cover the full costs of producing and marketing electricity, including an ordinary or fair return on the actual dollar investment. In fact, the language of the

¹⁸ Cf. Keezer and May, *Public Control of Business*, p. 170.

¹⁹ In the case of the Tennessee Valley Authority the ordinary or fair return becomes, of course, the actual interest charges. The Tennessee Valley Authority Act provided that in the case of property taken over the Tennessee Valley Authority (e. g., the Wilson Dam) the authority should find its "present value" as a basis for determination of investment costs.

T. V. A. Act seems capable of interpretation to mean that electric rates should bring in revenues which, in addition to returning the full power costs, including depreciation and interest, will provide sums for gradual repayment of the bonds issued to finance the investment.²⁰

To the extent that electric revenues of T. V. A. are in fact large enough to provide, in addition to payment of full power costs, sums for liquidation of any of the investment (whether investment in power equipment or in other equipment or in facilities common to all three services is immaterial), the rates charged will obviously be above the lowest rates that would just yield the full annual costs of the actual dollar investment—the standard apparently deemed most desirable by the three commissions whose policies have been surveyed above. In one respect, then, the standard apparently contemplated by Congress and employed by T. V. A. calls for rates somewhat higher than those appropriate either to the standard of the lowest rates that yield an ordinary return on actual investment or to the standard of maximum economic consumption. However, since the interest rates paid by the T. V. A. are far lower than the measure of "fair return" on private capital allowed by the State commissions, this does not mean that rates set by T. V. A. must be higher than those required for equivalent investment by privately owned utilities; in fact, the reverse is clearly true.

We have seen, moreover, that regulatory commissions seem to be barred by the law from requiring electric companies to reduce rates on the expectation that enlarged consumption will prevent income from falling below the amount equivalent to a fair return; and that the most effective commissions have thus been forced to resort to the less satisfactory device of routine, periodic reductions designed to eliminate excess income after it appears, and to calculate the effect of rate reductions on income on the basis of past consumption alone with no regard for probable increases in consumption on account of the lower rates. It is scarcely to be doubted that this process, at its best, and even when supplemented by objective rates, may never bring rates very close to the lowest remunerative level, especially when the matter is complicated from time to time by reductions in cost owing to factors other than increasing volume.

A Government corporation not subject to legal restrictions of the sort that have hampered the commissions in seeking lower rates can simply put into effect the lowest level of rates which, on the basis of demand and cost studies, show a good expectancy of covering full costs. In large measure this seems to be what T. V. A. has done. T. V. A. rates were fixed on the basis of study of experience with rates, consumption, and costs elsewhere in this country and in Canada and study of potential consumption in the Tennessee Valley area. The rate level set was much below that previously in effect in the valley—in some instances as low as 50 percent of the former rates—and sub-

²⁰ In order "to make the power projects self-supporting and self-liquidating, the surplus power (i. e., power not used by the Tennessee Valley Authority in its other activities) shall be sold at rates which . . . will produce gross revenues in excess of the cost of production of said power . . ." (Tennessee Valley Authority Act, sec. 14). The engineering staff of the Joint Congressional Committee Investigating the Tennessee Valley Authority estimated that with the present rates, electric revenues of the Tennessee Valley Authority would, in addition to covering all power costs and the annual expenses for navigation and flood control, enable liquidation of the entire investment for these three services in a period of about 50 years. The Annual Report of the Tennessee Valley Authority for 1938-39 predicted that from then on the electric revenues would be sufficient to "assist in the liquidation of the investment in other phases of the Authority's program."

stantially below rate levels in most other sections of the country. The response of consumption, stimulated also by the sale of cheap appliances, was phenomenal. Within a few years consumption per capita in the valley had risen to a point well above the national average and appreciably above many sections in the country. The practical demonstration of the potentialities of larger consumption at lower rates has influenced the rate policies of private electric companies and of regulatory commissions. The Annual Report of T. V. A. for 1938-39 seems to indicate that the rapid expansion of consumption has carried the Authority's power output close to full use of its present facilities.

The policies of Congress and of the T. V. A. implicitly assume that the full costs of power produced in a multiple purpose project such as T. V. A. can be calculated, in a sense significant for rate making. Congress has directed that rates are to cover these full power costs and yield additional revenue for gradual liquidation of investment, and T. V. A. has calculated the "full power costs." However, it is difficult to compute these full costs in the case of one service provided jointly with others by a multiple-purpose enterprise such as T. V. A., because the full cost of the one service, in the production of which there are used facilities common to the production of other services, cannot be ascertained definitely.

Now the capital costs of all facilities used solely for electricity can, of course, be calculated by ordinary methods. These include, in addition to the costs of the capital investment in transmission and distribution facilities, the costs of investment in generating equipment itself. The capital costs on account of all these facilities plus the operating costs incurred for the provision of electric energy may be called the full separable costs of electricity; that is, the costs which arise solely from production, transmission, distribution, and sale of electricity, or, to put it another way, the expenses on account of labor, supervision, materials, and equipment which yield electricity and electricity alone.

But the full separable costs of electricity, as thus defined, do not include any part of the capital costs of the investment in dams, storage basins, and appurtenances, which contribute jointly to provision of the three services of navigation, flood control, and power. An attempt to calculate the full costs of electricity must allocate the joint investment (and any joint operating expenses) between the three services. Techniques of allocation on one or another of several possible bases are well known, and the T. V. A., following the mandate of Congress, has made an allocation of the joint investment.²¹ But neither this particular allocation nor an allocation made on any other basis can discover the full power cost. It is simply impossible to ascertain what part of the joint investment cost is due to or caused by the production of power and what part is caused by the production of either of the other two services. Given the joint investment, the total cost of it must be incurred in order to produce any amount of any one of the services and when it is producing one of the services it is necessarily or automatically producing the others also.

²¹ After considering several different bases of allocation, the Tennessee Valley Authority chose the "alternative justifiable expenditure" method. An estimate was made of the investment required to produce each of the three services as a single-purpose enterprise. The proportion in which the total of these three figures were divided were then applied to the joint investment of the Tennessee Valley Authority. See Report of the Tennessee Valley Authority Committee on Financial Policy, June 6, 1938.

In practice, this means that the Authority must exercise considerable discretion in allocating joint costs. Thus, according to part I of this report:

T. V. A. power costs can be increased or reduced within very wide limits of reasonableness merely by including therein a larger or smaller proportion of the common investment. The allocation actually employed by the Authority, although one of several allocations easily permissible under the terms of the T. V. A. Act (sec. 14)²² is, nonetheless, quite different from any allocation urged by the advocates of private power.

From a theoretical point of view, in a multiple-purpose project maximum economic consumption will exist when the largest joint investment is made that will satisfy the following conditions: (1) The annual benefit from the last increment of each service enabled by the last increment of joint investment is equal to the annual full separable cost of producing that increment of service, and (2) the total annual benefits from all the services are equal to the total of the full separable costs of all plus the annual joint investment cost incurred for all the services. It is immaterial whether or not any one of the services yields benefits (evidenced by prices paid by consumers in the case of commercial sale or by estimates when the service is given to consumers and paid for by taxes) larger than its full separable costs, provided all together yield a sum of benefits which covers the total joint costs as well as the total of the separable costs.

The available evidence is not of a sort to tell us whether or not the T. V. A. investment as a whole satisfies these conditions. It indicates however, that the sale of electricity at the present rate level of T. V. A. may ordinarily return considerably more than its full separable costs, even after the contemplated 10 dam system is completed.²³

There is a third condition for an economically justifiable multiple-purpose project. Its expansion should not proceed so far that the full separable cost of the last increment of any one service exceeds the full cost of provision of that increment by a single-purpose enterprise. With regard to electricity, this means that T. V. A. should not expand its capacity to serve any community where its full separable costs of production, transmission, and distribution would exceed the full costs of a local single-purpose electricity enterprise.²⁴ It is this third condition which gives rise to the view that rates for T. V. A. energy in each locality should be set equal to the full costs of providing electricity in that community by the most efficient alternative method.²⁵

It should be added that once the estimated right or desirable amount of investment in a multiple-purpose project has been converted into

²² Sec. 14 provides, in part, the board shall make a thorough investigation as to the present value of dam No. 2, and the steam plants at nitrate plant No. 1, and nitrate plant No. 2, and as to the cost of Cove Creek Dam, for the purpose of ascertaining how much of the value or the cost of said properties shall be allocated and charged up to (1) flood control, (2) navigation, (3) fertilizer, (4) national defense, and (5) the development of power. The findings thus made by the board, when approved by the President of the United States, shall be final, and such findings shall thereafter be used in all allocations of value for the purpose of keeping the book value of said properties. In like manner, the cost and book value of any dams, steam plants, or other similar improvements hereafter constructed and turned over to said board for the purpose of control and management shall be ascertained and allocated.

²³ See Annual Report of the Tennessee Valley Authority for 1938-39.

²⁴ In most instances such a local enterprise would use a steam generating plant.

²⁵ For an elaboration of this view see the chapter on the Tennessee Valley Authority by M. G. de Chazeau in the forthcoming study of the Twentieth Century Fund, on Relations Between Government and the Electric Light and Power Industry. Rates set by the Tennessee Valley Authority according to this standard would constitute a real "yardstick" for the electric rates of private enterprise. The impossibility of discovering the full costs of generating power in a multiple-purpose project render rates made on any calculation of the full power costs of the Tennessee Valley Authority a meaningless yardstick for the rates of single-purpose electricity enterprises.

specialized operating equipment the same general principle of pricing for maximum economic consumption applies as in the case of a single-purpose project; the level of prices for each service that is sold commercially should be made equal to the increment cost of providing the service. If demand falls or technological advance reduces the cost of operation with new and different equipment the old level of prices will be too high for maximum economic consumption.

In such a situation, however, Government enterprise is at some disadvantage as compared with private enterprise. Experience demonstrates that investors in private enterprise have borne, willingly if not cheerfully, a large part of the burdens of obsolescence and decline in demand through losses or lowered returns on their securities. On the other hand, investors in Government securities in this country expect to be paid, and ordinarily have been paid—in the case of the Federal Government, at least—the full guaranteed return, whether it is earned or not. This being so, with declining demand or advancing obsolescence, the Government is presented bluntly with a choice between maintaining or raising prices to maintain revenues, if possible, or recouping the deficits from taxation.

The foregoing discussion of the economic principles which should govern the pricing of one service produced by a multiple-purpose enterprise must not obscure the major achievement of the T. V. A. in the pricing of electricity. Whatever the amount of revenue which ought to be obtained by the sale of a service, produced either by a multiple-purpose or a single-purpose enterprise, there may be more than one level of prices at which this amount of revenue can be secured. The particular merit of T. V. A. pricing is that it has aimed in the direction of the lowest level, rather than some higher level of prices, and in so doing has graphically illustrated the elasticity of consumption at lower rates which most other electricity enterprises had failed to explore.



CHAPTER IV

THE LEVEL OF PRICES AND INCOMES UNDER FEDERAL MILK CONTROL

COOPERATION, CLASS PRICES, AND PUBLIC CONTROL

Public control of milk prices by the Federal Government and by several of the States, discussed in part II of this monograph, differs markedly in two respects from commission regulation of utility rates and of coal prices. In the first place, milk control exhibits a combination of two kinds of control, collective bargaining by private organizations and price fixing by a Government agency—the Secretary of Agriculture and the A. A. A. in the case of Federal control and administrative departments or boards in the case of State control.

Cooperatives of dairy farmers grew rapidly in the post-war years, encouraged by the United States Food Administration during the war and by the passage of the Capper-Volstead Act in 1922 exempting associations of agricultural producers from the antitrust laws.¹ In many milk markets collective bargaining on producer prices by cooperatives and large distributors became well established during the twenties. Government price regulation was inaugurated only after the cooperatives found it impossible during the depression of the thirties to prevent drastic declines in producer prices. Many State governments and the Federal Government have provided for some form of regulation of milk prices.

In general, regulation by most States and by the Federal Government under the A. A. A. program, has had as its purpose the maintenance of prices to milk producers at a higher level than could have been continuously obtained otherwise; it has not been intended, nor has it operated, to alter the existing structure of the milk markets. The principle and the apparatus of collective bargaining between the producer cooperatives and the large distributors have been accepted. Regulation has strengthened and supplemented this machinery.

Federal regulation, for example, has not been instituted in any market without approval of the local cooperative. In some measure the A. A. A. has operated by marketing agreements voluntarily entered into by cooperatives and dealers. In the case of Federal orders the present law requires that before an order is imposed on a market, or substantially changed, its provisions must be approved by two-thirds of the producers selling in that market, or by producers furnishing two-thirds of the milk entering that market. Since the law also provides, in effect, that a cooperative casts the total of its members, votes for or against a proposed order, the cooperative has in most markets a practical veto power. The A. A. A. has encouraged the strengthening of cooperatives in order to facilitate the work of fixing

¹ Power to prevent undue enhancement of prices by such associations was vested in the Secretary of Agriculture. There has been no legal determination of what constitutes undue enhancement.

prices and of allocating receipts and the enforcement of prices and payments to producers; and in order to insure that the cooperatives would be left in good condition in the event of withdrawal of Government price fixing.

In the process of regulation the Federal Government and many of the State governments have not in the main endeavored to raise the prices of all the milk entering the regulated market for all uses, but primarily prices of milk devoted to certain uses, especially fluid milk and cream. In addition to these two uses milk is manufactured into a variety of food products such as butter, cheese, condensed milk, evaporated milk, ice cream, etc. The typical structure of milk prices to producers, *f. o. b.* city market, is made up of different prices per hundredweight for milk to be used as fluid milk, as cream, or as manufactured milk products. In most areas, milk used as fluid milk is known as class I, that sold as cream as class II, and that going into manufactured products as class III.²

Even in the absence of price control, either by cooperatives, distributors, or government; there would exist permanent price differentials *f. o. b.* city markets between the different classes of milk. The normal price differentials would be attributable in part to differences in cost, especially transport cost and sanitation requirements involved in production and delivery of milk for different uses. Health authorities ordinarily require of producers whose milk is used for fluid consumption standards with respect to equipment, care of herd, and the like, that are not required of producers whose milk goes into manufactured products. The extra costs would naturally appear in a price differential. In the absence of market controls, differences in cost of transporting an equivalent unit of milk in the forms of fluid milk, cream, and butter or cheese are the most important reason for price differentials. Freight rates per mile are much higher per unit of milk contained for fluid milk than for cream and higher for cream than for butter. Because of the differences in freight costs and the corresponding price differentials in the city market dairy farmers located near the city will find it more profitable to ship fluid milk, those somewhat farther out will ship cream, and only butter and cheese will be shipped from a third zone, still more distant. To farmers near the border of the milk and cream zones it is, of course, practically immaterial whether they ship milk or cream. But if the price of fluid milk in the city should go up relative to the cream price, then the border of the milk zone would be pushed out farther, as former cream shippers in the nearer part of the old cream zone would now find it more profitable to ship milk. By decreasing cream shipments this would raise the price of cream so that some butter shippers in the nearer part of the butter zone would ship cream instead of butter.

The borders actually are areas rather than lines. Moreover, some plants making condensed milk, evaporated milk, cheese, or butter, or other manufactured products are often established in the milk and cream zones around a city market, in order to dispose most economically of certain unavoidable surpluses of fluid milk. For these reasons some part of the milk of many farmers in the milk and cream

² In some markets there are only two classes, fluid milk and cream constituting one, and all manufacturing milk the other. In a few markets a large number of classes have been distinguished. For example, for several years past with exception of one short period, there have been nine classes in the New York City market.

zones will be used for manufactured products at all times, and especially in the summer months of greatest milk production.

Milk market regulation is centered around particular city milk markets; but it should be remembered that the zones proper to one city market often overlap zones proper to another city, and that a large city often reaches several hundred miles over many smaller intervening city markets for its butter and cheese and sometimes for its cream and milk. For example, the New York and Boston milk zones overlap in parts of eastern New York State and western Vermont; and both cities draw most of their butter and cheese and some cream from the Middle West.³

During the late twenties dairy cooperatives supplying a number of cities were able to raise the prices of class I milk relative to class III prices. The differentials were widened substantially beyond differentials which would merely have reflected differences in costs.⁴ Evidently this was possible because the cooperatives were able to exercise some measure of control over the amount of milk entering fluid consumption, thus retarding the expansion of supply as demand increased and because city health authorities sometimes aided control of class I sales by refusal to inspect farms located outside a certain radius, thus delimiting the milk zone.

In 1930 many of the cooperatives were able to maintain fluid milk prices fairly well, so that there were only minor declines, whereas prices of class III milk dropped rapidly, opening up a much wider gap than had prevailed in the previous decade. The natural result ensued. During 1931 and 1932 much milk that had formerly gone into manufactured products appeared on the fluid milk market and class I and class II prices crumbled.⁵ This was the occasion for the pleas from producers for Government assistance which became embodied in the A. A. A. and the various instances of State milk control.

Government control intended to raise milk prices received by producers and to increase producer incomes, the general purpose of all cases of milk control examined in this study, has two alternatives that can be effective. One is to raise all milk prices, which can obviously be done only by curtailing total production of milk for all uses⁶—a task which is beyond the power of most State governments and would be a formidable job for the Federal Government. The other practicable alternative is to increase the price of class I milk (or the prices of both class I and class II milk) leaving the price of milk for manufactured products untouched at its competitive level—in other words to widen the class price differentials. This is what the cooperatives were successful in accomplishing in the latter twenties but could not maintain during the depression, and what government has since attempted. Public control agencies have, with some exceptions, treated the problem of price differentials (where they have treated it at all) principally in relation to the objective of raising the average or "blended" price of milk and the income of producers. For this reason, and because some States have fixed only the price of fluid milk or one price for fluid milk and cream, most of the discussion of milk price

³ John M. Cassels, *A Study of Fluid Milk Prices*, pp. 143 ff. and 192. Boston has received very considerable parts of its cream from the Middle West. The same might have been true of New York if city authorities had been willing to inspect dairies west of Pennsylvania.

⁴ Cassels, *ibid.*, 166 ff. and 184 ff.

⁵ John D. Black, *The Dairy Industry and the A. A. A.*, pp. 72 and 231.

⁶ Unless, of course, demand for milk in some or all uses happens to be growing, in which case no Government assistance is needed to raise prices.

fixing, which has widened the spread between the prices of fluid milk and manufacturing milk, is presented here rather than in the later section where the pattern of prices is treated.

There seems to be little doubt that government regulation with the aid of cooperatives, can achieve this end in some measure. The total gross revenue received for any given amount of milk can be increased in this way, provided that diversion of sales from class III uses to class I and class II uses can be restricted to a negligible amount. Increases in class III production are prevented by leaving class III prices to settle themselves at levels which do not attract additional output. Provided the differentials are not widened too much, diversion of sales from class III to higher classes can be restricted in considerable measure by the use of the "base-surplus" plan, which will be described below, by the control of cooperatives over their members, through enforcement proceedings against nonmembers who "chisel" into the higher paying markets by price cutting, and by refusal to admit any new producers into milk markets or by erection of obstacles to entry that limit the number of new producers, such as imposition of a probationary period during which the newcomer receives payment for all of his milk at the lowest class price. It is generally believed by distributors, producers and milk control authorities that little reduction in consumption will attend increases in the price of fluid milk within a considerable price range with the result that gross receipts will grow nearly in proportion to the price increases. Even if class III prices are depressed a bit, by a slight increase in the quantity of milk disposal in these channels, these prices are not likely to drop enough to offset the gain on fluid milk. Unfortunately there have been no adequate studies of the relation between fluid milk prices and consumption, particularly over the longer term, and it is by no means certain that market changes in price will not have important ultimate effects on the sales of fluid milk.

For most States, at least, it would be impossible to carry through successfully a policy of markedly raising all class prices through production control. It could perhaps be done by a State (or cooperating group of States) which imported from surrounding States negligible quantities of milk or other dairy products and which was in fact largely cut off by distance or exceptional freight rate barriers from the chain of independent markets sketched above. In the case of a State already importing from others or so situated relative to outside producing areas that substantial imports would be attracted by marked increases in prices, the difficulties of enforcement would be enormous even apart from constitutional obstacles. Moreover, in order to raise class III prices along with the other class prices, those States which obtain large amounts of manufactured dairy products from outside areas—as, for example, many Eastern States—would have to fix higher minimum prices of butter, cheese, evaporated milk, and other manufactured milk products, or else abandon processors located within their own borders, and hence subject to the higher class III prices, to the ruinous competition of processors located outside. In the heavily settled parts of the country, at least, it would seem that the raising of all milk prices through control of production of all milk could be accomplished only by the Federal Government.⁷

⁷ According to present interpretation this would appear to be unconstitutional, for the Court has not yet accepted the fact that the prices of milk which moves across State lines are affected by the prices of milk which sojourns within one State. See Part II, p. 75.

Apart from constitutional obstacles it is obvious that the Federal Government would also be in a stronger position than most State governments to carry through successfully the second of the two effective policies—that of widening the differential between class I and class III prices. The extent to which a State can raise class I prices and sustain them is limited by potential imports, which will be bootlegged, or recognized and permitted, according to the State's policy. At present the A. A. A., restricted by constitutional interpretation to markets receiving interstate milk, finds itself in somewhat the same position. If it had the power to raise class I prices simultaneously in all markets it could probably raise them higher than it can now do in any one market subject to the influences of neighboring markets that cannot be regulated by A. A. A.

Suppose, for example, that the price of class I milk in Boston were boosted by 25 percent. Large amounts of milk produced in New York and Vermont and now shipped as class I milk in New York, would immediately receive a marked price advantage if they could be sold in Boston. The same would be true of some class I milk sold in other New England cities. Producers of much cream hitherto shipped to Boston from points beyond the previous boundary of the milk zone would now have a very strong incentive to ship fluid milk instead of cream. To sustain the high class I price in Boston for any considerable time would require prohibitions against additional receipts of fluid milk and an army of inspectors, or else an advance of class I prices in other New England cities and in New York and an advance of class II prices both in Boston and in these other cities. To hold the much higher class I price in New York it might then be necessary to raise the class I price in other markets. Maintenance of the high class II prices in New England and New York would require raising the class III prices in these areas and also throughout the Middle West, since middle Western farmers would otherwise find it profitable to attempt to sell cream (class II) in the eastern markets. Substantial increases in class III prices would encourage greater production of milk for manufactured products so that it would become impossible to enforce these prices. As they declined it would once again become difficult to enforce the high class II and class I prices, etc. and so the chain would be completed.

Thus, although this hypothetical example may be somewhat exaggerated it should be clear that even where the local cooperative includes all current shippers of fluid milk and cream and can police them successfully, there are definite limits to the amount by which the class I price, or class I and class II prices, can be permanently raised above the class III price—limits determined by the complex of price relationships with "outside" areas and the ability to exclude additional receipts of milk and cream by one device or another.

In the light of this market situation, the discussion which follows concerns the objectives and standards first of Federal and second of State milk control.

FEDERAL MILK CONTROL

Legislative Objectives and Standards.

The purpose of the laws under which the Department of Agriculture fixes minimum prices of milk is to raise the prices and the incomes of milk producers. The original Agricultural Adjustment Act, which

applied also to other important farm commodities, set as a standard prices at which agricultural commodities would have the same purchasing power in terms of articles bought by farmers as in the base period 1909-14. Congress has also provided, however, that if satisfactory data are not available for the years 1909-14 the period August 1919-July 1929 may be used as the base period or any portion of this post-war period "for which the Secretary of Agriculture finds and proclaims that the purchasing power of such commodity can be satisfactorily determined from available statistics of the Department of Agriculture." It appears that the post-war period has been generally used in computing purchasing power parity prices for milk.

Provisions contained in the Agricultural Marketing Agreement Act of 1937 make the parity standard or goal elastic upward if the Secretary of Agriculture finds that the parity prices "are not reasonable in view of the price of feeds * * * and other economic conditions which affect market supply and demand for milk and its products." No definite standards are given for the adjustment of prices above parity to make them reasonable. It is merely directed that they shall "reflect such factors, insure a sufficient quantity of pure and wholesome milk, and be in the public interest." Such phrases cover a great variety of possible standards.

Congress has provided no standards for reduction of milk prices. Prices of agricultural products are to be reestablished at a defined parity, but maintenance of this parity, if there should be a marked decline in the prices of goods bought by farmers, is not required. And, in any case, prices are to be above parity when that is necessary to make them reasonable. There is no provision for the fixing of maximum prices.

The law authorizes equalization of the average or "blended" price per unit received by producers shipping fluid milk to distributors, on a market-wide basis unless producers of three-fourths of the total volume favor equalization only among those shipping to a given dealer. In general under this system the total amount due to all producers included in the pool is calculated on the usual class basis; this total is then allocated to the individual participating producers in accordance with their total shipments. In other words each producer receives a uniform "blended" price, based on the total amount of milk he ships, and irrespective of the proportion of milk from his particular shipment used for each class.

Administrative Standards.

Although the Dairy Section of the A. A. A. has continuously computed parity prices it appears that this standard has not in fact been much used in fixing prices. The principal explanation is to be found in a realistic regard for the competitive market situation described above, which in the absence of control of total milk production in important producing areas has rendered it impossible to raise prices in most markets to the parity levels and hold them there. Moreover, constitutional limitations and the lack of power to institute Federal regulation except where it is desired by cooperatives have restricted the number of markets brought under Federal control. Hence, prices have had to reflect competitive influences from nearby regions except where cooperation between State control agencies and the A. A. A. have enabled a measure of integrated control for a considerable area.

Prices in most markets under Federal regulation have apparently remained well below parity levels. In July 1939, of 23 markets under Federal order 18 markets had fixed prices below computed parity. In 13 the prices actually paid were substantially below parity.

During 1933 the theory of the Dairy Section of the A. A. A. and of the cooperatives seems to have been that large increases in the class I and class II prices, if accompanied by partial production controls for class I and class II milk and minimum resale prices that maintained dealers' margins, would produce an automatic, if lagging, increase in prices of milk entering manufactured products. The original 15 Federal marketing agreements and licenses set class I and class II prices much above the previous levels in these markets. Producing areas from which milk might enter the city market were delimited, usually in accordance with the existing boundaries, often somewhat extended, of the milkshed. Within the milkshed partial production control was fostered by encouragement of base-surplus schemes involving producer quotas for class I milk.

These schemes involve modification of the pooling arrangements which have been described above. Each producer is allotted a quota (in physical units) which is the maximum quantity for which he will receive the established fluid milk price. Any excess of his sales over this "base" is classed as "surplus" and is paid for at the lower rates established for milk which is not destined for fluid use. The total proceeds in the pool are then divided into two fractions,—that representing the total value of all fluid milk and the remainder representing the value of milk for all other uses. The first fraction is then split among producers in proportion to their respective base quotas; the latter in accordance with the amounts of the surplus milk which each delivered during the period. In case the total sales of fluid milk exceed the total quotas, the division of the base-pool is adjusted correspondingly, but this rarely happens because total quotas are ordinarily set 10 percent above estimated sales.

Under these agreements minimum retail prices were fixed, in most cases at levels which would maintain or increase dealers' margins, in order to gain the cooperation of dealers and to prevent price cutting by dealers, which often resulted in or from price cutting on class I milk by producers. With fixed prices observed by many, if not most producers and distributors, there is, of course, a strong inducement to the individual producer whose milk is used and paid for largely as class II or class III to sell his whole output to a dealer at something below the fixed class I price but above his "blended" or average price. Obviously the dealer also profits if he can shade the prevailing retail price a little.

It is scarcely to be expected that in the hurly-burly of the initial effort in 1933 any clear-cut standards would be developed. Reflection should have shown that the theory was wrong. As it was, experience soon demonstrated, partly through increasing violations, that class III milk, instead of following along up in price, was being diverted, again, as in 1930-31 into higher-priced uses.

In the face of much opposition from producer organizations the Department of Agriculture announced a new policy early in 1934. The two effective alternatives were recognized—raising all class prices through production control or merely widening the spread between unregulated class III prices and the prices fixed on class I and class II.

The latter objective was adopted temporarily pending the development and acceptance of a general scheme of production control for all dairy products. General production control never eventuated. Hence, the temporary policy of maintaining as wide a spread between the uncontrolled class III prices and the regulated class I and II prices as could be continuously sustained, without serious threat to the balance of fluid milk receipts and consumption in each market and without numerous violations, became the regular policy.

The basic element in this policy is acceptance of the uncontrolled class III prices as the base of the pyramid. Consideration is also given, of course, to class I and II prices in nearby markets not under Federal control, for the endeavor is in general to fix the highest class I and II prices in Federal orders which, given all the existing competitive influences, can be successfully maintained. This does not mean, of course, that the minimum prices fixed by the Secretary of Agriculture are the prices which would exist with effective competition in milk markets which eliminated all differentials between class I, II, and III prices except those which merely reflected differences in cost. Rather, the endeavor is to maintain the widest differentials above class III prices that are feasible under given circumstances.

With this policy there was less reason for delimitation of producing areas for particular markets and all such restrictions were removed. The amendment of 1937 specifically provides that no Federal marketing agreement or order shall restrict entry into any market of any milk or milk products produced anywhere in the United States. Since adoption of this policy restrictions on production have been limited to sanitary requirements and inspection policies of local authorities, the probationary period, and base-surplus schemes. Retail price fixing was also abandoned with the new policy, except where producer-distributors were a large factor in the market and seemed to need protection, and instead other measures, such as strengthening of cooperatives, were relied upon.

Under this realistic policy something approaching the nature of standards has been developed. These standards relate, of course, to the margin that can be maintained between the class III prices—or the prices of butter and cheese which are always closely related to class III prices—and the class I and II prices. An upper and a lower limit for the class I price in a given market are estimated as follows. The upper limit represents the current price of butter plus the average differential between the class I price and the price of butter in the latter half of the twenties, adjusted for any substantial changes in quality or transport costs. This "historical" standard is regarded as the highest possible price attainable in most markets, inasmuch as it is recognized that the spread between butter prices and class I prices in the latter twenties was unusually favorable and may have been higher than could have been maintained for a longer period.

The lower limit represents an estimate of what the class I price would be if there were no element of market control, if class price differentials measured only differences in cost. This "competitive" standard is computed by adding to the current price of milk for manufactured products at the edge of the milkshed, transport charges, cost of meeting sanitation requirements, a quality premium, special handling costs, and a premium for convenience of location.

Evidently the general policy is to fix the price somewhere between these two limits after study of the peculiarities of the particular market such as the proportion of the production in the milkshed controlled by the cooperative, the strength of the cooperative and the past success of base-surplus plans, the number of producer-distributors and the number of small distributors, the general attitude of producers, the volume of class III milk near the edge of the milkshed, the size of the present surplus (above fluid requirements) being carried by the market and whether it is increasing or declining, and the like. But it must be borne in mind that selection of the actual price to be fixed will be affected by the opinions of the officers of cooperatives, which have a veto power, and of the distributors, whose cooperation is important.

Results.

The statistical analysis of price changes prepared by Mr. Waite and presented in his report on Federal milk control, indicates that producer prices have been substantially raised in the 20 markets regulated by the A. A. A. for which continuous series of monthly prices were available. In 14 cities under Federal control during most of the period 1934-37 the annual average price paid producers increased by 1.72 cents per quart between 1933 (when prices in markets under Federal control, under State control, and under no control all reached their low points of the last decade) and 1937. During the same period the average price in 9 cities with State control increased by 1.66 cents per quart and the average price in 15 cities with no public control rose by 1.10 cents per quart. The rise in 6 cities under Federal control for a smaller part of this period was 1.56 cents per quart. In markets with Federal control the average 1937 producer prices were closer to prices prevailing 10 years earlier in these markets than was the case in markets under State regulation and in markets under no Government regulation. The average prices in the two sets of markets under Federal control approached more closely to the 1927 prices by a half a cent to a cent a quart, equivalent to 20 cents to 40 cents a hundredweight. Similarly the average prices in the markets under Federal control were closer in 1937 to the highest annual average prices in the twenties than was true in the other markets. It is probable that the Federal milk program exerted an influence extending beyond the markets under direct Federal regulation, by facilitating price increases obtained by cooperatives or by State control boards.

In the middle of 1939 the fixed minimum prices were above the computed "competitive" prices in all but one of the 23 markets under Federal control and in most cases the margin was substantial. Actual prices paid to farmers exceeded the "competitive" prices in all the 23 markets, in nearly every case by a substantial margin. Evidently the twin control of A. A. A. and cooperatives has been successful in maintaining a spread between class I and class III prices which appreciably exceeds the cost differential. The spread has not, however, been restored to the width it attained during the latter twenties. In only one market was the price paid to farmers in the middle of 1939 above the upper limit or "historical" price computed by adding to the current price of butter the margin between butter prices and class I prices in the predepression years. In most markets the price remained considerably below this upper limit. Even so, there were

signs in a few markets that, as a result of producer pressure, price had been fixed at a level too high to be maintained for any considerable period. There seem to be no data available on the effect of Federal milk control on capacity or number of producers.

Milk producers have gained in two ways from Federal milk regulation. Prices have probably been maintained at higher levels than could have been achieved without minimum price fixing by Government. Secondly, regulation has insured payment by dealers of the fixed minimum price for all milk actually used as class I, through better accounting, independent auditing and checking procedures. Along the same line the A. A. A. has modified many customary fixed deductions for transport and handling charges long used by dealers in computing net prices paid to farmers. In many instances these customary deductions had been rendered quite arbitrary by the development of cheaper methods of handling milk.

Owing to the highly complex and technical nature of devices for making uniform and equalizing prices paid by dealers to producers, it is impossible in a study of this scope to treat that matter adequately. It may be said, however, that in three ways the work of the Dairy Section of A. A. A. has probably had a tendency to diminish legitimate causes of friction between different producers over differences in the average, or "blended" prices received. The design, technique, and processes of equalization schemes have been improved. Secondly, the A. A. A. has endeavored to put into operation an equalization plan applying to all producers in a market rather than one applying merely to all producers selling to a particular dealer. This means that differences between dealers in proportionate sales of milk in different use classes are eliminated as a cause of differences in blended prices received by different producers who, because of similar seasonal production patterns and similar location relative to the market should receive the same blended price. Finally, in assignment to producers of base-ratings or quotas for class I deliveries the endeavor has been made to make them reflect seasonal production patterns and, to some extent at least, location.

Annual data on dealers' retail margins from sales to the family trade suggest that distributors as a whole have been affected comparatively little by Federal milk control. The margin has increased somewhat since 1933, returning almost to the margin prevailing in the late twenties. Changes in dealers' margins in markets under Federal control have been slightly more favorable than in markets with no control. The changes in markets with Federal and State control have been nearly identical. It is probable that the reduction in price cutting in producer prices has benefited large, well-established dealers at the expense of small dealers, who often sought to expand their sales by reducing their retail prices below the prevailing levels.

With little change in dealers' margins, the changes in retail prices have reflected principally the changes in producers' prices, which have been borne by ultimate consumers. Evidence of the widening spread between class I and class III prices in the twenties is contained in the increasing difference of the retail price of fresh milk over that of evaporated milk. Price statistics indicate that this trend has been continued and accentuated in markets under Federal control. It may be significant, in this connection, that sales of canned milk have increased sharply in relation to sales of fluid milk during the past decade.

It should be recalled that consumers have no direct representation in the process of collective bargaining between producers and distributors; they affect the market primarily through their purchases. Two provisions permit consumer influence on price fixing by the A. A. A. Consumers or their representatives may appear at the public hearings, and the office of Consumers' Counsel was established in the Department of Agriculture to guard consumers' interests in the A. A. A. program by providing the Secretary with critical reviews of proposals. Participation of consumers in hearings has evidently exercised a negligible effect on the program, largely because consumers or their organizations do not have sufficient information or cannot do the work necessary to put up a case that can compare with that of the producer organization or the briefs of the A. A. A. staff, but there is some evidence that consumer organizations are beginning to play a somewhat more effective role.

Only in a very few instances have objections made by the Consumers' Counsel been sustained by the Secretary over the recommendations of the Dairy Section. The staff of the Consumers' Counsel is small relative to the combined staffs of all the commodity sections of the A. A. A.; yet the Consumers' Counsel is expected to review the whole program.

There has always been a group in the A. A. A. which believes that in addition to the program of raising producer prices an endeavor should be made by the Federal Government to diminish the high costs of distribution of milk. It appears, however, that nothing of consequence has been done along this line. Congressional intent and administrative activities have remained essentially devoted to the single purpose of raising prices and incomes of milk producers.

CHAPTER V

THE LEVEL OF PRICES AND INCOMES UNDER MILK CONTROL IN FIVE STATES

OBJECTIVES AND CONTROL DEVICES

Part II of this study includes reports on State milk control in Indiana, New York, Wisconsin, Oregon, and California. Minimum price fixing and measures to protect producers from dishonesty in payments by distributors have constituted the principal elements of similarity in the programs of the five States, which otherwise exhibit marked differences in objectives, in control devices, and in standards. One of the purposes of this report is to indicate, at least in part, the variety of State milk control programs and to compare their aims and methods.

Wide differences exist between these States both in the relative importance of milk and other farm products and in the proportionate use of milk for fluid consumption and for manufactured products. In Indiana dairying is much less important than the production of corn, hogs, and beef cattle, whereas in New York dairying is the major farm enterprise, contributing about 50 percent of the State's farm income. Wisconsin leads all States in milk production with a little more than 10 percent of the total output in the country. About 75 percent of the milk produced in New York is consumed as fluid milk and cream, while 85 percent of the Wisconsin milk production goes into manufactured products, particularly cheese and butter. The extent to which differences in State milk control programs reflect differences in characteristics of the kind just noted is not, however, clear.

On the other hand, the importance of actual or potential imports of out-of-State milk as a limiting factor on price increases is plain. Of the States included in this survey New York alone imports substantial quantities of fluid milk under present price relations. It would appear that the other States could raise prices somewhat further than New York without attracting substantial imports, unless out-of-State prices themselves should decline for some reason.

All of these five States fix minimum producer prices, in some markets, of milk and cream for fluid consumption. None of them provided for fixing maximum prices, with exception of the New York law in effect from 1933 to 1937, which empowered the Board to fix maximum wholesale and retail prices. This provision, however, was not used. Minimum prices of manufacturing milk are set in several of these States, although these prices often seem to be fixed primarily for the surplus of fluid milk producers. There is no indication that any of these States has attempted to raise the price of manufacturing milk above the existing competitive level. For reasons

explained above this would be impossible without control of imports and of intrastate production of manufacturing milk and its products. In four of these States the endeavor to enlarge producer incomes has taken the form, similar to that of Federal control, of raising the prices of fluid milk, and sometimes the prices of fluid cream. In these States the attendant widening of the spread between prices of fluid milk and manufacturing milk may be viewed either as a method or a result of the endeavor to increase producer incomes by raising the only prices that could be raised with the devices at the disposal of the authorities. It has represented ideas of a "due" or "fair" spread between prices of fluid milk and manufacturing milk. In California, on the other hand, this price spread has been regulated with the purpose merely of ensuring a margin that adequately covers the extra costs of providing milk for fluid consumption above the costs of producing manufacturing milk.

At present four of the five States discussed here fix minimum wholesale and retail prices, New York having abandoned this feature of the control program in 1937. The primary ostensible purpose of fixing minimum retail prices is to preclude the possibility that price-cutting at retail may impair the producers' price structure, but this contention has never been fully demonstrated. In three of these States, Oregon, New York, and Indiana, producers must obtain permits from the State authorities in order to sell in fluid milk markets. Wisconsin and California do not restrict entry into the market. Oregon alone attempts to achieve effective restriction of production for fluid consumption by requiring a base-surplus plan of payment to producers. All five States license dealers.

In all of these States except California the main purpose of milk control appears to be the raising and maintenance of the income of fluid milk producers. The principal objectives in California are maintenance of a differential between the prices of manufacturing and fluid milk sufficient to cover the extra costs of producing the latter and the achievement of high efficiency in the distribution of fluid milk. The State laws frequently mention other objectives such as preservation of an adequate supply of pure and wholesome milk, elimination of unfair practices, arresting the fall in values of farm property which impaired tax collections, and promotion of recovery. In most cases it is not clear that price control is needed for attainment of the first of these secondary ends, and as we shall see, it is doubtful that milk price increases, as such, can promote recovery.

The five State programs may be summarized as follows. Oregon exercises the strongest control found in any of these five States. A three-man board, composed of members having no connection with the milk industry, fixes minimum prices at each stage—producer, wholesale, and retail—of milk entering fluid consumption, determines market areas and corresponding production areas (or milksheds), licenses producers and distributors, fixes producer quotas for payment at established minimum prices, and administers market-wide equalization pools. Although total output by farmers producing for fluid consumption is not fixed, rigid control of entry to the market and of quotas for payment at fluid milk prices enables the prices of milk and cream for fluid consumption to be effectively divorced from a competitive relation to the price of manufacturing milk. A public agency enforces an effective program of price raising and price maintenance for the benefit of the producers.

In Indiana a five-man board composed of two representatives of producers, two representatives of distributors, and the commissioner of agriculture acts, in the main, only after requests from local advisory committees of producers and distributors. In large degree public control in this State takes the form of promulgating and enforcing orders, the terms of which have been worked out through collective bargaining between producers and distributors, and of preventing the entry of new producers into the fluid milk market in numbers sufficient to increase substantially the fluid milk surplus. New producers must obtain a permit from the board and distributors may neither discontinue purchase from a producer, except for violation of sanitary requirements, nor inaugurate purchase from a new producer without consent of the local milk committee and approval of the board. No base-surplus quota plan or equalization scheme is required, as in Oregon. Such matters, like most others, are left to the wishes and initiative of producers and dealers in the various markets. No uniform arrangement exists in these markets and it is Mr. Froker's conclusion that base-surplus schemes, of which several have been in operation, have not been used in Indiana in such a way as to exercise effective restriction of output. The board fixes minimum producer prices and wholesale and retail prices in markets where such action is desired by the representatives of producers and distributors. Producer prices are divided into three classes. The minimum price for class III milk, surplus fluid milk to be used in the manufacture of butter and cheese, is set according to the price of butter, and hence represents approximately the price that would obtain without price fixing for this class of milk.

The Indiana law is unique in one respect among the State laws covered in this study. It permits a check-off from payments to producers and a similar charge on distributors to finance measures for betterment of the quality of milk. In only one market, Indianapolis, has this provision been used, however. It appears that in this case quality has been appreciably improved. Public control in Indiana appears to have made no attempt to improve efficiency in distribution.

The lack of a base-surplus quota scheme that effectively restricts production and the apparent fact that entry has not been so rigidly restricted as in Oregon make it apparent that public control of price and supply has not been as strong in Indiana, where matters are left largely to collective bargaining, as in Oregon.

During the 4 years 1933-37, milk control in New York possessed many features common to the programs of Oregon and Indiana. Since 1937 the emphasis has been on building effective machinery for collective bargaining or self-government to replace direct exercise of State control. The new law, however, makes provision for State orders, and a joint Federal and State order was issued in 1938 for the metropolitan market including New York City and neighboring areas of New Jersey.

During all but the first year of the period 1933-37 the New York program was administered by the division of milk control set up within the department of agriculture and markets.¹ In 1934 a milk advisory committee, composed partly of representatives of producers and distributors, was created within the division of milk control. The law

¹ During the first year administration was in the hands of a milk control board consisting of the commissioner of agriculture and markets, the commissioner of health, and a director appointed by the Governor.

provided that the commissioner must consult this committee and that he could not issue an order without prior approval by majority vote of this committee. Through this administrative machinery the State determined market areas, issued permits to fluid milk producers, licensed distributors, and fixed minimum producer prices and minimum wholesale and retail prices in markets throughout the State.

Inability to control imports of fluid milk from other States has limited the degree of control of prices and supply of fluid milk, especially in the New York City market.² In recent years the increasing economy of tank-truck shipment from nearby areas has tended to reduce the proportion of out-of-State milk entering the New York City market; but it appears that actual and potential imports still constitute a substantial limiting factor. Perhaps for this reason no attempt was made in New York State to restrict production of fluid milk producers through a rigid base-surplus scheme as in Oregon. The 1934 law authorized the establishment of producer quotas whenever a quota scheme could be made applicable, under Federal or State statutes, to all producers supplying the New York City market, but this provision has never come into application.

New York has fixed minimum producer prices for several classes of manufacturing milk—in New York this means very largely surplus fluid milk disposed of in manufacturing outlets. These manufacturing milk prices have been set according to the existing competitive relations with out-of-State manufacturing milk.

The minimum resale prices encountered great opposition in New York State, making enforcement difficult and costly. In 1937 the legislature decided that the emergency responsible for the original law of 1933, and its annual extensions with amendments, no longer existed. The change in program adopted at this time involved complete abolition of resale price fixing and the endeavor to substitute collective bargaining, with State assistance and supervision, for Government orders as the method of determination of prices.

The laws of 1937 and 1938 authorize producers' cooperatives supplying a common market area to form a producers' bargaining agency, and authorize distributors operating in such a market area to establish a distributor's bargaining agency. Producers' and distributors' bargaining agencies then have the right to conclude marketing agreements covering such elements as prices to be paid producers by dealers, terms, and conditions of sales and payments, production quotas, and trade practices. A marketing agreement so established is effective unless the commissioner of agriculture and markets finds that the agreement will result in monopoly or restraint of trade.

Upon request from both producers' and distributors' bargaining agencies the commissioner may, after hearings, make a marketing agreement effective as an order binding all producers and distributors in the market area if he finds that the agreement was properly reached, that its terms are equitable, and that its establishment as an order for the whole market is required in the public interest.

According to a third provision the commissioner may, on recommendation from a producers' bargaining agency representing at least 35 percent of the producers supplying a market area, issue an order fixing producer prices on a market-wide basis, if he finds after hearings

² In *Baldwin v. Seelig* (55 Sup. Ct. Rep. 497, 1935) it was ruled that a State had no power to require that no milk from outside the State should be sold within its borders unless it had been purchased at prices not less than the minimum producer prices in effect within the State.

that a State order is required in the public interest and if the order is approved by 75 percent of the producers supplying that area.

The present laws in New York may be summarized as follows. They endeavor to foster machinery for determination of producer prices, supply, and terms of payment through collective bargaining; to lend the assistance of the State in extending the terms of proper agreements for a given market to non-participants engaged in business in this market when that is necessary to make them effective, and to provide for public price fixing, presumably in the absence of marketing agreements, when that is desired by a large majority of producers and seems necessary to maintain orderly marketing and desirable producer incomes. Under these laws several bargaining agencies have been set up. State orders have been issued for the New York City and Buffalo markets and applications have been under consideration for orders in a few other markets.

In the period 1933-37 in which wholesale and retail prices were fixed by the State it appears that some attempt was made, through control of dealer margins, to improve efficiency in distribution, but this endeavor was evidently much less vigorous than in California.

It may seem to be something of an anachronism that public authorities in Wisconsin, a State long in the forefront of public utility regulation, were among the first to adopt the new doctrine so popular in the thirties that price cutting constituted unfair competition. In 1932 the Wisconsin Department of Agriculture and Markets, acting under broad powers for the regulation of unfair competition and unfair trade practices, ruled that when producers and distributors handling 90 percent of the milk in a market agreed upon a marketing plan and on prices, it was unfair competition for the other participants in the market to depart from the provisions of the agreement including, of course, the prices agreed upon.

In 1933 the department of agriculture and markets was empowered by a special milk control law, passed as an emergency measure effective for 2 years, to fix minimum producer prices and resale prices. Although this law, which has been reenacted with slight changes at successive 2-year intervals ever since, was tied for legalistic reasons to unfair trade practice regulation, its main purpose has been to "stabilize" the fluid milk market, which evidently means to raise and maintain the incomes of fluid milk producers. The administrative agency had a tendency, especially in the earlier years of the program, to base its orders on agreements made by collective bargaining between producers and distributors.

The objective seems to have been pursued through the endeavor to widen moderately the spread between the prices of manufacturing milk and the prices of fluid milk and cream. Prices of surplus fluid milk have been fixed by formulas expressing the competitive prices of manufacturing milk. Control of production of fluid milk and cream has not been attempted. With exception of the Madison market, base-surplus schemes of payment have not been required, nor has the State, except in the early years of the program, exercised any restrictions on entry of new producers into fluid milk markets. It is obvious that in a State with such a large volume of production of manufacturing milk, a strong restrictionist program designed to confer great benefits on fluid milk producers would be difficult to enforce.

State milk control in Wisconsin has evidenced no interest in improving efficiency of distribution. Store and milk-stand prices lower than home delivery prices have been eliminated in most markets with the result that milk has been "kept on the wagons."

A California statute passed in 1916 empowered the director of agriculture, on request from producers and distributors of farm products, to assist them in improving efficiency in marketing and to arbitrate controversies. In 1932, the director, acting under this law, assisted producers and distributors of fluid milk in several cities to attempt more effective price control through establishment of local milk trade boards, composed of representatives of producers and distributors, which announced producer prices and resale prices. Federal control inaugurated in several California markets in 1933 and 1934 was soon withdrawn because of doubts of its constitutionality. Fluid milk markets in California are served almost entirely by California producers.

State control was initiated in 1935 and further developed by laws passed in the ensuing 2 years. These laws are administered by the director of agriculture and a special staff in this department. The objectives and standards of milk control in California differ strikingly from those of the other State control programs reviewed in this study. The chief purposes in California are to maintain differentials between producer prices of fluid milk and manufacturing milk that are merely adequate to cover the extra costs of producing fluid milk of desirable quality and to maintain wholesale and retail price differentials that protect the minimum producer prices and at the same time cover, but no more than cover, what appear to be the costs of efficient distribution. Emphasis on keeping the differentials no larger than necessary seems to be as strong as that on making them adequate.

The administrative agency demarcates a market area and prepares a "stabilization and marketing plan" for this area, which becomes effective upon approval of 65 percent of the producers serving that marketing area. A stabilization and marketing plan includes prohibition of a set of unfair practices by which dealers could evade the minimum price requirements and contains minimum producer prices of fluid milk, or methods by which they are to be designated. A plan may also contain provisions for reports from distributors to producers, minimum prices for fluid cream, and, if 65 percent of the producers desire it, a market pool for making uniform payments to all producers. Whenever a stabilization and marketing plan goes into effect the administrative agency must also fix minimum wholesale and retail prices or specify methods of deriving them.

The minimum prices are fixed on the basis of extensive cost studies. In most markets only one producer price has been fixed, applying to both milk and cream. Prices of surplus milk for disposal in manufacturing outlets have been fixed in a few markets only.

Since California does not try to maintain a differential between the prices of manufacturing and fluid milk that exceeds the difference in cost of production, control of entry into fluid milk markets is, except for sanitary requirements, quite superfluous. Indeed, the California law seems to prohibit both restrictions on entry and any limitation on the production of fluid milk or cream, other than minimum price fixing itself. If market pools are adopted they must evidently be of a form which merely equalizes or makes uniform pay-

ments to producers without any base-surplus scheme which, like that in Oregon, encourages restriction of output for the fluid market. It should be understood, however, that minimum price fixing itself hampers entry, in the absence of a market-wide pool, for distributors have little incentive to take on new producers at the same price that they are paying established producers.

STANDARDS AND RESULTS

Producer Prices.

According to the milk control law of California the minimum price to be paid producers of fluid milk—

shall be based upon the economic relationship of the price of fluid milk for the market area involved to the price of manufacturing milk, taking into consideration the additional costs incurred in producing and marketing fluid milk over and above such costs incurred in producing and marketing manufacturing milk.

The Oregon law directs that in setting minimum prices—

the board shall ascertain what prices for milk in each locality and market area of the State will best protect the milk industry and insure a sufficient quantity of pure and wholesome milk in the public interest.

In carrying out this general mandate, the board is directed to consider "all conditions affecting the milk industry" including "costs of production" and "the price necessary to produce a reasonable return to the producers."

Evidently the prices of fluid milk could bear the same relation to the prices of manufacturing milk under the laws of these two States. The California law attempts to set a rather specific standard. The vague standards of the Oregon law could probably be interpreted to mean the same thing. It seems probable, however, that this has not been the case, for if they had been so interpreted there would be little point in the measures adopted in Oregon that control entry to the fluid milk markets and discourage expansion of production by producers already in.

The Oregon law provides that all producers who were supplying a given market with fluid milk at the end of 1933 may continue to sell in that market until they voluntarily withdraw. For the rest, the board is empowered to demarcate the production area from which a given market may be supplied. Moreover, no new producer in this area may sell fluid milk in the corresponding market without receiving a permit and a quota from the board. Mr. Anderson was unable to ascertain any specific standards used in demarcating production areas. It appears that scarcely any new producers have been permitted to enter any fluid milk markets, although transfers of quotas between producers already legally in the market have been allowed.

The board does not specifically limit the production or sales of milk by fluid milk producers. It does, however, allot quotas under the required base-surplus pooling scheme of payments to producers. As already indicated,³ this is a scheme for equalizing or making uniform payments among all producers serving a common market, irrespective of the proportions in which their milk is sold by their particular distributors as fluid milk or surplus milk disposed of in manufacturing outlets. But it is more than a pure equalization scheme, for each producer is allotted a quota (in physical units) which is the maximum

³ See pp. 109 ff.

quantity for which he will receive the established fluid-milk price unless the total sales of fluid milk exceed the total quotas. Such a possibility is unlikely, inasmuch as the total quotas are ordinarily set 10 percent above the estimated sales. Under this arrangement the individual producer has little incentive to expand production much beyond his quota, for it is most probable that all of his additional production will return to him merely the low surplus price. In a pure equalization scheme without quotas the whole output of the individual producer is paid for according to the proportions in which the total output is divided between fluid milk sales and surplus sales. With this arrangement the individual may reason that a large addition to his output will have no effect on these proportions in the whole market and will thus bring him a much larger revenue from his enlarged fluid milk payments.

From the control devices adopted in Oregon and the way they have been applied one would infer that the endeavor has been made to lift fluid milk prices to a height exceeding the prices of manufacturing milk by more than the full extra costs of providing the former. Little more than this can be said. Although the Oregon board has made some studies of cost of production, Mr. Anderson was unable to ascertain just how costs have been used as a standard. It does not appear that the board has given any definite content to "reasonable return." Whether prices have been set so as to maximize the profits of producers in the field at the time when State control was established, or have been fixed at a level considerably lower, is not clear.

In California extensive studies have been made in many markets to determine the additional costs of producing fluid market milk over and above the costs of producing manufacturing milk. Most items in the extra costs the department regards as unvarying throughout the seasons of the year. In this class belong wages, transportation, rent, depreciation, herd replacement, interest, and taxes. The only important item that is held to vary seasonally is the cost of feed, which constitutes approximately one-half of the total cost of producing fluid milk.

The minimum producer price for fluid market milk is built up as follows. The current price of butter in a nearby market, after certain adjustments,⁴ gives the base price of manufacturing milk. To this is added the extra feed cost at current feed prices and the extra cost on account of the other, unvarying items. The minimum prices change, then, in accordance with changes in the prices of butter and of feed.

It will be recalled that the minimum price of fluid milk is to be based on the "economic relationship" of this price to the price of manufacturing milk as evidenced by the "additional costs" of producing the former. Evidently the department has interpreted "additional costs" to mean something more than short-run increment costs. Although no profit seems to be included, interest and rent are included. Cost as computed by the department would not seem to be above the increment cost of increasing production by adding new producing units, but it may be substantially above the increment cost of enlarging output from existing producers. If so, the minimum prices are higher than those that would give maximum economic con-

⁴ These adjustments pertain to the cost of making butter, the value of the remaining skim milk, and the "over-run" value of a pound of butterfat compared to a pound of butter which results from the fact that a pound of butter is equivalent to only eight-tenths of a pound of butterfat.

sumption as defined in an earlier section.⁵ Although the department has used a "supply line" or "marginal producer" type of cost analysis in setting distributors' margins, it appears that in fixing producer prices the additional cost in a market represents an average of the additional costs of producers for whom cost data are available to the regulatory agency.

The milk control legislation in Wisconsin provides no definite standards. Instead, broad general powers are conferred on the department of agriculture and markets to prescribe terms of handling and sale, including minimum prices, with the expressed purpose of eliminating unfair competitive methods and practices. The department was specifically directed to consider the terms of any collective bargaining agreement in existence in a market. At first, the administrative agency appears to have confined itself largely to enforcement of the terms of such agreements. After an interval it began to obtain testimony on cost of production. Apparently prices equal to full costs of production, including reasonable wages to the farmers and their families and interest on their investment, have been regarded as the goal, but it has been recognized that up to the present this goal has been impossible of achievement owing to the pressure of potential fluid milk surpluses. It will be recalled that Wisconsin does not limit entry to fluid milk markets nor attempt to restrict production by those already in the market. In practice, cost information seems to have been used chiefly as a basis for increases in price when increases in cost, such as higher feed prices, occurred.

Reductions in prices of fluid milk and cream in several markets in the middle of 1939 reflected a twofold tendency toward increasing production for fluid markets and growing substitution of other food products for milk. Prices of manufacturing milk had declined in 1938 and 1939, and consumer incomes had been reduced by the industrial recession. The former level of fluid prices could not be maintained satisfactorily in the absence of limitations on shifting from production of manufacturing milk to production of fluid milk and cream. The unevenness of price reductions in the several markets in 1939 suggests that varying local competitive relations to prices and supply of manufacturing milk were the principal consideration.

This evidence indicates that State control in Wisconsin has been successful in appreciably raising prices of fluid milk and cream relative to prices of manufacturing milk. Mr. Froker reports, however, that prices have not been maintained at a level high enough to return to most producers in most markets full average cost of production, including reasonable wages for the farmers and their families and interest on their investment.

Evidently the standard for fluid milk prices used by the authorities in Wisconsin has been the most remunerative prices—up to full average cost of production—that could be successfully maintained in the absence of control of entry to the market and limitations on production, except such control as could be established by producers themselves. Since most fluid milk producers have apparently not received full average costs of production (as reckoned by the authorities), it may be inferred that manufacturing milk prices have ordinarily been below the full average costs of producing manufacturing milk

⁵ Insofar as the price of manufacturing milk itself is below full average cost, however, the price of fluid market-milk will also be below full average cost.

or that the differential between the prices of fluid milk and manufacturing milk has not ordinarily covered the average full extra costs of producing the former, owing to the presence of overcapacity in fluid production or that both of these conditions have existed. If the average full extra costs of producing fluid rather than manufacturing milk have been covered in Wisconsin the result has been similar to that aimed at in California. If these full extra costs have not been covered, fluid milk prices have been closer in Wisconsin than in California to short-run increment costs of expanding production without increasing fluid capacity.

It will be recalled that in Indiana public control of fluid milk prices consists mainly of enforcement of prices determined by collective bargaining of producers and distributors and control of entry of new fluid producers. The legislative standards for price fixing are vague. Producer prices, fixed by the board, uniform to all licensed producers in a given market, are to be "just and reasonable"—the typical "standard" contained in public utility laws. The law provides that in determining producer prices the board is to be guided by cost of production, the value of milk in terms of its basic products—butter, cheese, and evaporated milk—the supply of milk in the market, and the welfare of the general public. The law announces further that "any prices fixed pursuant to this act and approved by the board as herein required shall be deemed to be *prima facie* reasonable."

Mr. Froker was unable to discover that any definite content has been given to these considerations through development of standards by the board. Evidently the orders issued represent the judgment of the board after taking account of the considerations mentioned in the law and the requests of producers and distributors on the terms of bargained agreements. This seems to be a process not of judgment in the implementation and application of standards, but of judgment without definite standards. The wide range of differences in the prices of fluid milk and cream as between different markets in July 1939 indicates that prices have been influenced by elements other than those of quality, cost, and other production conditions.

While it is unquestionable that public control in Indiana has endeavored to maintain levels of prices of fluid milk and cream above those that would prevail in the absence of State control, it seems doubtful that any one particular relation between prices, costs, incomes, and production has been aimed at in all markets or in most markets. Perhaps this fact, which seems exemplified in the lack of standards, is to be explained by the policy of relying largely on collective bargaining for determination of market results.

It is not clear whether it is true that the general policy of State authorities acting in cooperation with local private interests has been to maintain the most remunerative producer prices consistent with control of entry and the absence of other limitations on production of fluid milk and cream. Moreover, in exercising control of entry, the board appears to have used no clear standards. Prior to 1939 the board licensed new entrants in the Indianapolis market in numbers corresponding, roughly, to the number of withdrawals. Since the new producers evidently had more capacity than those withdrawing, this policy was not sufficient to check a marked growth of surplus milk in this market over the years 1936–38, during which fluid consumption remained approximately stationary. In 1939 the board

deemed it necessary to reduce fluid prices in this market and to relate the issuance of permits to new producers to the effects on total production rather than on number of producers. The increasing surplus, spurred partly by falling butter prices, made it evident that the level of fluid prices which had prevailed with little change in this market for 3 years could no longer be maintained satisfactorily.

Evidence on the results of State milk control in Indiana is quite meager. It is Mr. Froker's opinion that fluid prices to producers and producer incomes have probably been raised somewhat in a score of markets, but there is no basis for conclusions on the extent of these increases. Apparently the main effect has been to insure attainment of the market results implicit in agreements reached by collective bargaining supplemented by State control of entry of a rather indefinite, none too rigorous, sort.

The New York legislation, under which minimum prices—for producers, and to retailers and to consumers—were established by the division of milk control in the department of agriculture and markets, sets forth several general considerations to guide the authorities in price fixing. Prices were to be reasonable when compared with costs of production, hauling, processing, etc.; they were to be set at levels, in the various local markets, that would best protect the milk industry; they should tend to insure a sufficient quantity of pure and wholesome milk to consumers; and they should be set at levels which would be most in the public interest. The administrative agency was directed to consider "the balance between production and consumption, the costs of production and distribution, and the purchasing power of the public." It will be remembered also that no order could be issued without approval of a majority of the milk advisory committee, composed of representatives of producers and distributors and some other interested groups.

Mr. Froker did not discover that any definite content was given by the administrative agency to these legislative guides. Prices of fluid milk and cream and milk for ice cream were raised materially upon inauguration of control in 1933. Fluid prices in the New York City and Buffalo markets were held stable between 1934 and 1937 when price control was dropped. After withdrawal of price control fluid prices in these markets first dropped, then fluctuated unevenly. The joint Federal and State order for the New York metropolitan market issued in 1938 again raised fluid prices, which subsequently declined with suspension of the Federal order early in 1939 (and non-enforcement of the State order), to rise once more with reinstatement of the Federal order after a favorable Supreme Court decision.⁶

There is no doubt that the State authorities in New York endeavored to raise the incomes of fluid milk producers by raising the prices of fluid milk and cream relative to the prices of manufacturing milk. It appears that this was accomplished in some measure. But the level of fluid prices aimed at is not at all clear, unless it was the most remunerative prices possible, given the ever-present threat of increasing imports from other States, and the lack of State-enforced limitations on production other than control of entry to fluid markets. Although it appears that the volume of milk on the market has been a consideration in approving or denying permits to new producers, Mr. Froker discovered no standards relating the issuance of permits both to vol-

⁶ *United States v. Rock Royal Cooperative, Inc., et al.* (307 U. S. 533 (1939)).

ume of consumption and to some particular level of prices. For example, new producers were denied permits in the fall of 1939 at the same time that price increases were ascribed to drought and to the demands of producers already on the market.

As noted earlier, the New York laws of 1937 and 1938 encourage determination of market results by collective bargaining with State supervision. Although the commissioner of agriculture and markets is empowered to render a bargained agreement ineffective by a finding that it will result in monopoly or restraint of trade, these laws contain no definite standards delineating the lawful range of prices. The provisions in the laws for the issuance of price-fixing orders by the commissioner, under circumstances explained above, include much the same set of vague guides to price fixing that were included in the earlier laws.

The problems of fixing milk prices in New York State are probably more complex than those to be found in any of the other four States, owing to the greater importance of out-of-State milk and the larger variety of differences in local market conditions. Although greater complexity makes the development of satisfactory standards more difficult it does not render them any less desirable.

In summary, of these five instances of State control, California alone exhibits definite standards for the level of prices of fluid milk and cream. The difference in this respect between California and some, at least, of the other States may be partly ascribed, however, to differences in objectives. Where the purpose is to raise producer incomes as much as possible under prevailing conditions of demand and supply, including whatever kind of restrictions on supply the State cares to establish or to assist producers in maintaining, it is not likely that this objective or standards appropriate to it will be clearly and unequivocally stated in the law, for fear of the cry of "monopoly." Thus references in most price fixing legislation are to "orderly marketing," prevention of "unfair practices," advancement of public health, promotion of recovery, and the like.

In the second place, the failure of legislatures and administrative agencies to develop definite standards is doubtless closely connected with the policy of cooperation between a State agency and representatives of producers and distributors in working out the terms of orders. Where reliance for establishment of desirable market results is placed mainly on collective bargaining with assistance of one or another sort from the State, the provision of standards may seem unnecessary or superfluous. It should be recognized, however, that a legislature might lay down broad yet definite standards demarcating the limits within which collectively bargained prices would be considered reasonable and enforced by public authority, together with provisions either prohibiting prices outside these limits or forbidding the use of State power in enforcing such prices. Such a policy would be more likely to promote broad economic efficiency than the policies followed in most of these States.

Resale Prices.

We turn now to resale prices. All five of these States have fixed minimum wholesale and retail prices, although New York discontinued fixing of the resale prices in 1937. All of these States require the licensing of dealers.

As already mentioned, the reason most commonly advanced for fixing resale prices is that price cutting at retail may imperil the producer price structure. However, it is by no means clear that retail price control is always a necessary element of programs designed to protect the producer, and its more obvious effect is clearly to preserve existing distributive margins and practices.

In Indiana, Oregon, and Wisconsin, the legislative and administrative standards for the levels of minimum wholesale and retail prices are no more definite or clear than those for the level of minimum producer prices. In New York, the legislative standard for resale prices was more explicit than the considerations specified by law for the fixing of producer prices. In California the standards for resale prices are quite as definite and more detailed and explicit than the standards for producer prices.

The Indiana statute provides merely that minimum wholesale and retail prices must be "fair and equitable." The milk control board has studied the costs of distributors in order to determine the margins necessary to cover overhead and operating costs. Mr. Froker did not, however, discover that any definite cost standard was used by the board, as has been the case in California. A reduction in the distributors' margin in Indianapolis in 1939 was apparently made because of the growth of surplus milk in that market rather than because of any change in costs of distribution. Dealers' margins do not appear to have been reduced under State control in Indiana. In one market, Evansville, they seem to have been increased.

In both Oregon and Wisconsin the standards used by the control agencies in setting minimum resale prices seemed to have been approximately the same as the standards used in setting minimum producer prices. Hence, the discussion earlier in this chapter of the standards used in these States in the fixing of minimum producer prices applies here also. The Oregon board has fixed the dealers' margin in the Portland market somewhat higher than the margin prevailing just prior to the imposition of price control, and at about the same level as the margin existing in the early twenties. Although the Oregon board possesses strong powers to restrict the entry of new distributors, as well as new producers, it does not appear that the board has placed any substantial restriction on the entrance of new distributors; and the standards used by the board in granting or refusing licenses to new distributors are not clear.

The dealers' margin in the Milwaukee market—the only market for which data on dealers' margins in Wisconsin was obtained—has increased under State control. A substantial part of this increase, however, has gone into higher wages. In the Madison, Wis., market the Department of Agriculture granted what amounted to a retail price increase in 1937 after an increase in the wages of labor engaged in distribution.⁷

The New York law under which resale prices were fixed prior to 1937 provided that "a minimum wholesale or retail price to be charged shall not be fixed higher than is necessary to cover the costs of the orderly, efficient, and economical milk dealers including a reasonable return upon necessary investment." There is some fragmentary evidence that the authorities in New York State gave

⁷ The price increase was accomplished by abolishing several types of discount that had formerly prevailed.

some attention to the costs of distribution and improvement in the efficiency of distribution. For example, in the summer of 1933 an increase in distributors' margins was permitted because of a rise in the cost of supplies and an anticipated wage increase under N. R. A. In the New York and Buffalo markets, the data indicate that dealers' margins averaged less during the period of resale price fixing than in the preceding and succeeding period. In a number of instances, dealers' licenses have been denied to applicants on the ground that entrance of new distributors would involve both the unneeded duplication of facilities and an increase in the costs of distribution. However, the amount of attention devoted to improvement of efficiency in distribution in New York State has evidently been much less than in California.

The statutory standards for establishment of minimum wholesale and retail prices in California are more detailed and more specific than any other statutory standards examined in this study of milk control. The director must find that the minimum prices fixed—

(1) Are not more than reasonably sufficient to cover all necessary costs * * * including a reasonable return upon necessary capital invested, of reasonably efficient distributors and retail stores in a marketing area;

(2) Will tend to maintain * * * such number of reasonably efficient retail stores and distributors * * * as necessary to insure consumers * * * sufficient distribution facilities of the several types or methods commonly used by consumers;

(3) Will protect the interests of consumers * * * by insuring to them adequate and efficient distribution facilities of the several types or methods commonly used by them without requiring such consumers to pay more * * * than is necessary to maintain such adequate and efficient distribution facilities in such marketing area.

Moreover, the law states that in determining minimum wholesale and retail prices the director shall consider—

the amount of the available capacity for processing and distributing fluid milk, or fluid cream, or both, of all distributors in such marketing area and the estimated extent to which such available capacity is being used by such distributors.

Evidently these provisions mean that prices in a given market area are to cover the necessary costs, including a reasonable return on capital, of that number of efficient retail stores and distributors which is required to give adequate and efficient service of the sorts desired by consumers—no larger number and no smaller number.

The clause concerning capacity and its utilization, when taken in conjunction with the three other clauses, would seem to give the definite implication that prices are so to be fixed as to maintain in a market area only the number of efficient retail stores and distributors, the facilities of which can be utilized ordinarily at the highest practicable rate.

In applying these standards the California Department of Agriculture has endeavored to use the "supply-line" method. According to this method data are obtained to show the costs, when operating at capacity, of the firms in the market. These data are then compared with consumption and price data, and the price fixed at the level at which consumption will presumably equal the amount that can be supplied by the more efficient firms when they are working at practicable capacity. This method should be sharply distinguished from the bulk-line cost analysis as used in war price fixing in 1917-18. In the latter method the cost data obtained represented costs at actual

rates of operation. These were costs at capacity operation only if the firms happened to be operating at capacity.

A minimum price fixed according to the "supply-line" method would tend to maintain the minimum amount of most efficient capacity required to meet demand, and (unless the actual market price went higher) would tend to expel uneconomic capacity. For the long run, at least, this is a standard that will promote maximum economic consumption. When excess capacity exists, however, this standard is likely to result in prices above increment cost, unless the terms "necessary costs" and "reasonable return upon necessary capital invested" are so interpreted as to permit prices equal to increment cost.

Moreover, it is by no means clear that the standard is flexible enough to encourage major changes in methods of distribution which would result in substantial reductions in costs and prices. It seems to encourage greater efficiency along established lines, rather than the exploration of new methods.

The law does not define "necessary costs." The Department of Agriculture has undertaken studies of efficiency in distribution in order to develop standards by which to distinguish between necessary and unnecessary costs. It has not accepted the position of the distributors that items of sales expense generally incurred by distributors are ipso facto "necessary."

In the application of these standards for minimum resale prices the Department of Agriculture has been hampered by insufficient funds to make extensive cost studies and by the failure of many producer-distributors to keep adequate cost data. For this reason, as well as the shortage of time for Mr. Anderson's study, it has been impossible to discover the degree of success which may be expected in the use of standards such as those contained in the California law.

One difficulty should be noted in closing. The law endeavors to maintain in each marketing area "sufficient distribution facilities of the several types or methods commonly used by consumers," but apparently no more capacity than can be ordinarily used to a high degree. The language of the law makes no attempt to treat the difficult problem of the extent to which consumers prefer to pay somewhat higher prices in order to have a larger number of stores located closer together (with added convenience for many consumers), each of which operates at much less than capacity. Recognition that the law seems to neglect this problem, which has a very real relation to consumer problems, must be attended by recognition that this statute represents an endeavor, unique among the cases of milk control studies in this report, to set forth standards related to high economic efficiency.

CHAPTER VI

THE LEVEL OF PRICES AND INCOMES UNDER THE BITUMINOUS COAL ACT OF 1937

The Bituminous Coal Act of 1937, discussed in Part III of this report, provides for fixing of minimum and maximum f. o. b. mine prices for bituminous coal by a Federal agency,¹ and for marketing rules and regulations to prevent unfair competition. Until the launching of the defense program in the early summer of 1940 interest in price fixing under this act centered in minimum prices. In general fixing of minimum prices may have one or both of two purposes—to raise or maintain the income of one or more groups, or to promote conservation by limiting consumption. Although the regulatory agency was directed by the act of 1937 to study conservation, the price-fixing provisions of this law bear no direct relation to conservation except as they may possibly diminish the amount of coal sold for prices below the costs of production.

The principal objectives of the act of 1937, as stated in the law itself, are to "promote interstate commerce in bituminous coal" and to conserve coal resources by preventing "practices and methods of distribution and marketing" which "disorganize, burden, and obstruct" that commerce and make necessary the regulation of prices and of unfair methods of competition. The history of this act and its predecessors—the N. R. A. Coal Code and the Bituminous Coal Act of 1935—indicates, however, that the primary purpose was the establishment of minimum prices in order to insure sufficient income to the mines to enable them to pay higher wage schedules negotiated by collective bargaining. Other purposes are the reduction of operators' losses and the prevention of practices which have a tendency to intensify depression in the industry.

The Bituminous Coal Act attempts to diminish the pressure on wage scales resulting from competitive price cutting. Experience during the period of declining demand, which began in 1923 and was intensified by the depression of the thirties, demonstrated that with overcapacity in mines, equipment, and labor, uncontrolled competition in this industry meant a downward spiral of prices and wages as well as profits.

The act of 1937 provides that minimum prices are to be fixed so that the average price received per ton in each designated minimum price area is equal to the weighted average cost of the coal produced in that area in 1936 adjusted from time to time for any appreciable changes in cost. As defined in the act cost includes "the cost of labor, supplies, power, taxes, insurance, workmen's compensation, royalties,

¹ The act created a commission, reporting to the Secretary of the Interior. This commission was abolished by the second President's Reorganization Order, effective July 1, 1939, which transferred the powers, duties, records, staff, etc., of the Coal Commission to the Bituminous Coal Division of the Department of the Interior.

depreciation, and depletion (as determined by the Bureau of Internal Revenue in the computation of the Federal income tax) and all other direct expenses of production, coal operators' association dues, district board assessments for Board operating expenses only levied under the code, and reasonable costs of selling, and the cost of administration." In most of the industry wages constitute 60 to 65 percent of cost as thus defined.

For two reasons it is difficult to discuss price fixing according to the act of 1937 from the standpoint of economic standards. Although the act specifies one definite standard—the cost standard—for the general level of minimum prices, it includes also a number of considerations which can be formulated as standards, if at all, only through the work of the regulatory agency over a period of some years.

Secondly, and more important, although the minimum price fixing of the Bituminous Coal Act is related indirectly to the maintenance of wages, the act contains no standards relating to the substantive matter of the level of wages since wage fixing provisions in the Bituminous Coal Act of 1935 were declared unconstitutional.² In reality the standards of the law have to do with the mechanics of successfully preserving, through price fixing, the wage levels resulting from collective bargaining, without severely disrupting established competitive relationships among the multitude of coal operators.

If the antitrust laws (to prevent monopoly prices) and the much more recent Wagner Act (to promote collective bargaining) be considered together as a unified policy, their combined logic is as follows: Competition will prevent extortionate prices and by the same token make it impossible for labor, by a process of collective bargaining, to obtain wages that are too high. Conversely (if, indeed, the converse is ever considered) competition will allow prices sufficiently high so that collective bargaining may secure desirable levels of wages. The Coal Act evidences the fact that collective bargaining may be ineffectual in maintaining a decent living wage in an industry characterized by large excess capacity which cannot be turned to any other use, by very keen price competition, because of the great number of producers selling in every market, a high proportion of labor cost to total cost, and a highly specialized working population moving so slowly into other occupations that a large reserve supply of labor persists.

Thus the actual standards for minimum coal prices will, to an important extent, be determined in the process of collective bargaining between representatives of the miners and the operators, since labor cost is such an important share of the total cost of mining coal.³

The act places no limits on the height of wages. If maximum prices are set they must be fixed so as to yield a reasonable return to the operators above the minimum prices in effect, which according to the law must automatically reflect any increase in wage rates (or any other element of cost specified in the act) which raises the weighted average cost in a minimum price area by more than 2 cents per ton. Doubtless

² See Part III, p. 262.

³ Wage rates prescribed in the Fair Labor Standards Act or in any orders of the Administrator of the Wage and Hour Division of the Department of Labor are applicable to some extent in the coal industry. The Bureau of Labor Statistics has estimated that of the 405,900 wage earners and salaried workers in this industry that are subject to the Fair Labor Standards Act only about 1,100 were receiving less than 30 cents per hour in April 1939 and only about 7,300 were working more than 42 hours a week. (See Estimated Number of Workers in April 1939 Subject to the Fair Labor Standards Act Effective October 24, 1939.) In other words, an insignificant proportion of the workers in this industry were affected by minimum wage and maximum hour provisions that became effective in October 1939.

the large number of unemployed miners, and the realities of competition with other sources of energy that have persistently made increasing inroads on the consumption of coal in the past 15 to 20 years, will lead labor officials and operators to agree on wage scales that do not result in unduly high prices to consumers. It is obvious that the actual level of coal prices will depend substantially on the objectives of labor—whether they aim at the highest level of wage rates that can be obtained, or the level of wage rates that will maximize the total wages bill, or the aggregate income of employed coal miners, or the amount of employment—and their success in realizing their aims.

Coal price fixing is, of course, by no means unique in this respect. In some measure the same thing is true of regulation of railroad and utility rates and all instances of price fixing where going wages are accepted as a part of cost for price-fixing purposes. The difference exemplified in the case of coal is one of degree. Direct labor expense represents a higher proportion of cost in coal than in many industries.⁴

The observations made above must not be taken to imply the conclusion that both wages and prices should be fixed by government in the coal industry or in any other industry. From many standpoints in a democracy the case for leaving wage determination to collective bargaining is a strong one. By this process democracy is injected directly into economic life and government does not assume the difficult task of directly determining maximum wages, a task which, if it is ever assumed on a large scale, will provide a severe test of democratic government. It must be recognized, however, that when government buttresses by price-fixing the results of collective bargaining, the question may arise of the desirability of maximum limits on wages in order to preserve a satisfactory degree of efficiency in the economy in terms of the utilization of equipment and labor.

The discussion which follows does not consider these broad issues directly, but is principally concerned with the question: Will the standards for the general level of prices contained in this law be likely to achieve the objectives of the law, and will they conduce to maximum economic consumption possible with given wage rates?

The object of the law, as already stated, would seem to be to regulate minimum prices in such a way that the total sales revenue of the mines as a whole in a minimum price area will not tend to fall below their total costs as defined in the act, and hence threaten the maintenance of wage rates; and at the same time to preserve existing competitive relationships as between mines and districts, except where these relationships are in some obvious sense inequitable.

The level of minimum prices is to be set so as to yield in each price area an average price per ton equal to the weighted average of the total cost of all coal produced in that area, and altered from time to time to reflect any appreciable changes in costs. The components of cost listed in the act have been noted above. With the exception of depreciation and depletion, all are items which must be paid currently. Since these elements of cost represent principally expenses which must be recouped in order to continue in business without reducing wages (or some other element of cost) this standard for the level of minimum prices seems at first sight conducive both to attainment of the objec-

⁴ In several public utilities labor expense is a much smaller proportion than this. For the railroads as a whole labor expense has been between 50 and 55 percent of total operating expenses including taxes in the last 15 years.

tives of the act and to promotion of maximum economic consumption. But the question arises: Whose costs, what mines are to produce, and how is total production to be divided between high and low-cost mines?

The only answer to this question afforded by the law comes in a set of considerations which seem to call for preservation of existing competitive relationships between mines and districts. The considerations are set forth in such vague or general terms that they can be reduced to definite criteria only through the work of the regulatory agency.⁵

Minimum prices are to be "just and equitable as between producers" in the same district and "no minimum price shall be proposed (by the district boards) that permits dumping." No criteria of dumping are given. Prices for different districts selling in a common market area must be coordinated so that they are "just and equitable, and not unduly prejudicial or preferential" between districts, so that they reflect the relative market values of coals from the different districts, so that they "preserve as nearly as may be existing fair competitive opportunities," and so that they do not reduce or increase the average price per ton in any district below or above the minimum weighted average cost of the whole minimum price area "by an amount greater than necessary to accomplish such coordination."

The act does not, of course, require that the prices for each mine shall be such as to give it a return per ton equal to its weighted average cost, but applies rather to all in a district. And it permits variations in average price between districts in the same price area, insofar as they are necessary to accomplish the difficult task of coordination. In practice such variations will doubtless reflect in some measure the differences in costs between districts, and perhaps between companies. Thus although by its very nature price fixing does allocate business and profits and wages and employment in substantial degree, the regulatory agency is furnished by the law with no specific principles to decide what mines shall be permitted to operate, and how the business and profits and losses shall be divided between those that are enabled to operate. Will prices be set in such fashion that variations in production from time to time will be shared proportionately among the mines now operating or will the number of mines in operation contract and expand?

No definite standards of economic efficiency relative to this problem are included in the act. The phrases quoted suggest a general mandate to be fair to existing interests, and the Bituminous Coal Division has stressed this point in its findings.⁶ It is possible that standards of fairness might be developed in terms of relative efficiency of the various mines as indicated by some measure of costs. Some precedents for such an interpretation of fairness or equity are to be found in the interpretation of the laws relative to unfair methods of competition and in the regulation of public utility rates. Application of the distance principle in railroad rates is an outstanding example. But these precedents have been developed slowly and have almost always been modified by other notions of fairness related to preservation of existing or past relationships. On the whole, commissions and courts have not conceived of equitable relations primarily in terms of relative efficiency. Since the phrases "just and equitable," "not unduly

⁵ For interpretations of these considerations by the Coal Division, in the fixing of prices effective October 1, 1940, see Part III, appendix G.

⁶ See appendix G to part III.

prejudicial or preferential," "preserve as nearly as may be existing fair competitive opportunities" are given no definition of any kind in the Coal Act, since the emphasis is on fixing the level of minimum prices high enough to cover operating expenses, and since neither the purpose nor the standards as expressed in the law are explicitly related to efficiency, it seems most likely that the emphasis will be upon preservation of past relationships, for some time at least.⁷

It would appear that the language of the law is capable of interpretation to mean either preservation of past price relationships between mines and districts or preservation of past proportions of sales (except as these prices or proportions of sales reflect dumping or "unfair" competitive opportunities). With variations in total sales as, for example, between depression and recovery, it might be impossible to achieve the latter objective without altering past price relationships. The former interpretation would render equation of average price and average cost easier to obtain and would enable a closer approach to maximum economic consumption.

Whichever interpretation is principally used, the tasks of maintaining past relations will be exceedingly difficult, owing to the lack of adequate and reliable records of such relationships which, typically, have been in flux rather than fixed. In the future, relationships will certainly be affected by alterations in wage differentials, in types of equipment, or in other elements affecting relative costs, and by changes in demand between districts attending shifts in industrial location as well as competition from other sources of energy. The act provides no specific standards with which to face future changes of these kinds.

Let us now consider the application of these standards, the considerations involved in adjusting the minimum price level at the beginning, and those involved in subsequent changes in costs. It has already been emphasized that in a dynamic, changing situation standards are to be regarded as a goal toward which things should move. The endeavor must be to prevent movement away from the standard and to approximate it as closely as possible. In an industry subject to as many changing influences as coal—chief among which are variations in general industrial activity, substitute competition, fuel economy, changes in freight rates, and internal changes in technology and wages—this desirable result cannot be attained unless adjustments in prices are based, not solely upon the past, but upon the best possible estimate of probable future results. Moreover, readjustments to changed conditions must be made with celerity. In fact, however, the Coal Act as now worded seems to call for adjustment to past recorded costs and for preservation of past competitive relationships, without regard for future changes that will ensue as a direct result of such adjustments, to say nothing of adjustment to developing trends and probable future conditions. Whether this will be strictly followed by the regulatory agency remains to be seen.

Minimum prices are to be set so as to yield an average revenue per ton equal to the weighted average cost of a past period, not to current or future weighted average cost. The standard is the weighted average cost in the year 1936—i. e., the cost of the particular volume of coal produced in that year by the particular mines then operating

⁷ That this has, in fact, been the case, is indicated in the "General Findings of Fact" by the Director of the Coal Division. (See appendix G to part III.)

with the methods and under the conditions then obtaining—adjusted for changes in cost since then. "Upon satisfactory proof made at any time by any district board of a change in excess of 2 cents per net ton of 2,000 pounds in the weighted average of the total costs in the minimum price area, exclusive of seasonal changes, the Commission shall increase or decrease the minimum prices accordingly." The actual costs for the last 9 months of 1937 were used to demonstrate the adjustment to the 1936 costs required by an increase in wages effective April 1, 1937. In general it appears that adjustments for changes since the end of 1937 have been limited to items of which the effects on costs were definitely predictable, such as the increase in the Federal unemployment tax from 2 to 3 percent of pay rolls. It also appears that the effect on weighted average cost of a decline in production in 1938 to a level substantially below the output of the two preceding years has not been considered.⁸

The language of the act, quoted above, seems to call for a change in the level of minimum prices only after demonstration that there has been a change, of a nonseasonal nature, in actual weighted average cost, except for altered circumstances of which the effects on weighted average cost are highly predictable. Since the first prices under this act had not been fixed at the time this study was in preparation, we can only await further experience to see the extent to which the Coal Division will modify the minimum price level in accordance with anticipated effects on weighted average cost of changes in volume of production, in mine population, in methods used, in wage rates, or in the proportions in which different kinds or grades of coal are consumed. It remains to be seen what kind of evidence will be regarded as constituting "satisfactory proof"; and with what rapidity demonstrated changes in cost will be followed by changes in the level of minimum prices. It appears most likely that adjustments of the minimum price level to changes in cost will often be made only after a lag of at least several months, that the average minimum price per ton will often be equal to the cost in a previous year, and that it will often differ appreciably from current weighted average cost.

It should be emphasized that in setting the minimum price level the regulatory agency does not seem to be directed by the law to consider the effect of the price level on consumption,⁹ rate of utilization, or capacity, and the consequent repercussions on costs requiring further changes in the level of minimum prices. Although the objective of the Coal Act is evidently to prevent current total revenue from falling below current total expenses, no criteria are provided for the levels of consumption, production, operating capacity, and prices at which the equalization of current total revenue and current total expense are to be achieved.

⁸ It may also be noted that average revenue per ton will not equal past weighted average cost when changes occur in the relative consumption of different kinds, grades, and sizes of coal or of coal from different mines, unless such changes are predicted and allowance for them made in setting the minimum prices. In estimating the expected average revenue from the minimum prices that will be promulgated in 1940 it appears that the relative distribution of tonnage in 1937 has been used.

⁹ The law states that the minimum prices "shall have due regard to the interests of the consuming public," but it seems highly doubtful that this phrase in itself would be taken to mean that the Coal Division should select the lowest level of minimum prices which would tend to equate average price and weighted average cost in the near future. The injunction in the law to consider "the competitive relationships between coal and other forms of fuel and energy" does not seem to be a criterion for the level of prices. It appears to relate solely to the coordination of prices of coal sold from different producing districts in a common market. On this point my interpretation may differ from that of the Coal Division, for it appears that where a rise in the general level of prices in a given price area is necessary under the cost standard, the Coal Division endeavors to some extent to raise chiefly those prices, increases of which will not result in much decline of consumption through substitution of other sources of energy. (See Appendix E to Part III, pp. 347-344, and Appendix G, pp. 376 ff.)

In considering the interactions of consumption, costs, and minimum prices, variations occurring from year to year or over several years will first be treated, the problems of month-to-month variations and price adjustments within the year being reserved for later discussion.

Substantial yearly increases in consumption might for a year or so diminish current average cost (as interpreted in the act) below the average minimum price based on past average cost because of fixed overhead to a larger coal tonnage.¹⁰ It seems probable, however, that only a small proportion of the total costs specified in the act would remain constant with marked increases in production over a few years and that the saving on overhead might be offset by higher unit labor expense and other costs. When, as a result of higher labor and other costs, weighted average cost began to rise with expanding output, the lag in upward adjustment of minimum prices would mean that these minimum prices might not yield total revenue equal to current total expense. These are, however, minimum prices. Actual prices could be higher—equal to or above current average costs or increment costs—unless competition held them down to the minimum level. Indeed the lagging adjustment of minimum prices upward might have the beneficial effect of discouraging too rapid reentry of idle high-cost mines.¹¹

Much more important are the possible results of a substantial decline in consumption over a period of years. Such a decline might grow out of the expanding use of competing fuels induced by higher coal prices relative to prices of the other fuels or by changes in equipment or service; or it might grow out of a prolonged industrial depression such as that of the early 1930's, which greatly reduced the consumption of that large share of bituminous coal which is normally used by industry and by the railroads.

If the reduction in consumption persists for a time, it is likely that weighted average cost will tend to rise, first, because of overhead costs that cannot be, or are not, adjusted from year to year as output changes; second, because of the slow rate at which economies in wages or other direct costs will be made under fixed minimum prices; and, third, because it is unlikely that high-cost mines will be shut down at a sufficiently rapid rate to balance this tendency toward higher average costs. The history of this industry in the past 15 years shows that high-cost mines retire very slowly, even with marked reductions in coal prices. Such mines will have less reason to shut down if prospects are for higher average costs and higher minimum prices. Thus the very existence of a legal guaranty of minimum prices under the act may retard further the process of closing these mines.

Consequently, it seems probable that minimum prices will have to be raised somewhat as the consumption of coal drops and average costs rise. This is certain to occur if the weighted average cost increases by as much as 2 cents a ton. This is not unlikely, for if cost of production were \$2 a ton, and overhead represented 10 percent of the total, a drop of 10 percent in production would increase costs by 2 cents a ton. (In 1938 there was a drop of 20 percent in output.)

¹⁰ The authors of Part III state that in years of large consumption like 1937, fixed overhead forms a fairly small proportion (possibly 10 to 12 percent) of total cost; in years of small demand the proportion is, of course, higher.

¹¹ Because of the constant danger that actual prices might fall below yearly increment or even average costs.

Then, unless some major reversal of the trend of coal consumption, such as a rapid business recovery, took place, a vicious spiral might begin. The increase in minimum prices, necessitated by a rise in weighted average cost as a result of the initial decline in consumption, might provoke a further drop in consumption, causing a further rise in weighted average cost, a subsequent further increase in minimum prices, and so on, through successive price advances.¹² In each year the average price received, made equal to the average cost of the preceding year, would be below the current average cost.

The insidious effect of this "bootstrapping process" and its danger to the competitive position of the industry might not be realized quickly, because the immediate effect of the higher minimum prices induced by higher average costs might well be to yield a larger total gross sales revenue to coal operators. This is possible because the mine price of coal is usually only a small fraction of its delivered price, so that mine prices can be varied substantially with only a slight percentage increase in the delivered price.

Thus, if an increase in mine prices of 5 percent and in consumer prices of 2 percent were attended by a 3 percent decline in consumption the total revenue received by operators would be about 2 percent larger, although the total amount spent on coal by consumers was 1 percent smaller. In these circumstances the total losses of operators would be reduced by the price increase even if their total expenses remained the same, with the 3 percent decline in production. In proportion as expenses contracted, the reduction of losses would be greater. In such circumstances, it seems clear that the prospect of higher prices (and their subsequent establishment) will tend to reduce the rate at which high-cost mines close. If both consumers and operators expect this bootstrapping process of increasing prices to continue for some time, these expectations will enhance the rate of decline in coal consumption and diminish the rate of abandonment of operations by high-cost mines and may in the long run interfere with the basic objectives of the act.

Although the immediate effect of higher prices upon consumption might not be widespread, there might be instances in which important consumers change to other fuels.¹³ Over the longer term, however, the ultimate effect of a consistent application of the policy implicit in the provisions of the act may be serious. If sales were to continue to drop over a period of years, as minimum prices were raised successively, the consequence might well be to stimulate the use of alternative fuels and to contract the coal market permanently, unless coal price advances were made on types of coal where the effect on consumption would be slight.

It is plain that with a decline in consumption the cost standard for prices is ill-adapted to achieve the evident objective of the act—equality between current total sales revenue and current total costs (as defined in the law). The cost standard of the act is even less

¹² It is, of course, true that the effect on consumption of a rise in average cost and in prices would be minimized if the increase in the level of prices were brought about by ordering minimum price increases in markets where the effect on consumption would be very slight. Experience alone can demonstrate whether it is possible, in the various price areas, to meet the cost standard entirely by increases in particular prices which affect consumption only slightly.

¹³ A rise in coal prices may, of course, result in immediate shift to other energy sources by some consumers. For example, the president of the National Portland Cement Co. testified before the Coal Division in January 1940 that some cement companies, in process of plant rehabilitation, were delaying installation of heating equipment to ascertain whether, under the fixed minimum coal prices, coal or a substitute fuel would be more economical. (See *Journal of Commerce*, January 12, 1940.)

adapted to attainment of the objective of maximum economic consumption. The standard for maximum economic consumption is the lowest price which will return the average variable cost (wage rates, prices of supplies, and so on, being given) the amount of coal required to meet consumption at this price.¹⁴ Clearly the bootstrapping price increases represent movement away from this standard, rather than toward it, with increasing disadvantage to consumers in the form of higher prices and to labor in the form of less employment. Indeed the bootstrapping process has exactly the same effect as monopolistic cartel price increases designed to diminish losses or increase profits.

Given a decline in consumption bringing higher weighted average costs of sufficient magnitude to require an advance in minimum prices, it would seem to be impossible under the present Coal Act to approximate maximum economic consumption. That could be approximated only if there were no price increases on account of reduced volume of production, and approximation to that result would under some circumstances take place more quickly if there were a reduction in prices to hasten the retirement of high-cost mines. If the drop in consumption were regarded as due merely to an increase in coal prices, it could be minimized by prompt restoration of the former level of prices as soon as it began to appear. A decline in consumption resulting from reductions in prices of competing energy sources would probably call for both lower coal prices and smaller consumption of coal than theretofore. To attain the maximum possible economic consumption of coal under these circumstances coal prices should be reduced enough to hasten the retirement of high-cost mines and to check somewhat the shift from coal to substitutes. Diminishing consumption as a result of advances in fuel economy call for abandonment of production by some high-cost mines, and perhaps lower minimum coal prices.

The above strictures must not be taken as implying any criticism of minimum price fixing itself. Rather the point is that the technique used in minimum price fixing should be such as to keep conditions moving always toward maximum economic consumption. For this it would be necessary that the Coal Division be directed to consider the effects of prices on consumption and to adjust minimum prices so as to bring as soon as possible in the future an approximation of average price to average cost at the lowest average price which would equate production and consumption. The standard for minimum prices should be in terms of probable future costs rather than past recorded costs.

Several other influences on the trend of costs and hence of prices and consumption should be noted briefly. Price increases under the Coal Act may induce entry into production of sufficient additional mines, formerly idle but not abandoned, to diminish the average sales and average production of the mines already operating and increase their average costs, even though consumption does not fall. The higher level of minimum prices then required would set off the same vicious spiral of diminished consumption, higher costs, and increases in minimum prices, unless consumption were expanding enough to prevent the influx of new producers from causing an increase in average cost.

¹⁴ This statement is not true for the case of growing output attended by increasing average and increment costs, for when increment cost is above average cost the former constitutes the standard for price.

The Coal Act specifies that reasonable selling expenses are to be included in weighted average cost. The Coal Commission appears to have taken the position that the amounts of sales expenditure actually incurred represented the best criterion of reasonable selling costs. If the illegality of price competition at prices below the fixed minima results in enlarged selling expenditures, as it may well do, this will tend to increase weighted average cost unless the Coal Division forsakes the policy of the Commission and rules that no increase in selling cost per ton is reasonable. If an increase in selling costs is allowed to raise weighted average cost by more than 2 cents per ton a rise in prices will be obligatory and this may initiate the vicious bootstrapping process.

Moreover, weighted average cost may, in practice, appreciably exceed the true average variable expense. Mr. Gordon and Mr. Webb point out that although the Coal Commission correctly excluded various items of expense representing capital charges or earnings, substantial elements of return on capital may be included in the weighted average cost now or in the future. Hidden profits may enter weighted average cost in the shape of large selling commissions paid to affiliated selling companies, large royalties paid to affiliated land-owning companies, excessive depreciation or depletion, or inflated salaries of officers. The cost reported by any one company will in most cases exercise a negligible influence on the weighted average cost of a whole district. Although no one company has any incentive on this score to include any profits in its cost reports it may do so for other reasons, and if many companies do this the district average cost will thus include some element of earnings on capital. Moreover, a group of companies producing enough volume to affect the district average appreciably would have an incentive to report high costs if they desired higher prices, for the levels of prices will vary somewhat as between districts even though each district in a minimum price area is supposed to have an average minimum price as close as possible to the average for the whole area. Marketing agencies might conceivably exercise some influence on cost reporting.¹⁵ If prices have to be raised at any time on account of the influences mentioned in this paragraph, again the ridiculous self-propelling price elevator will start its climb.

Increasing purchase or leasing of coal mines by large consumers such as electric companies, in order to avoid the anticipated higher prices, will probably exercise little, if any, influence on weighted average cost as long as the regulatory agency continues to interpret the act to call for computation of the average cost of all coal produced by both commercial and "captive mines."¹⁶

Stability of prices and wages at levels higher than those prevailing in the last decade may encourage increased mechanization. This would be a force acting in the direction of lower weighted average costs, but it would seem likely to act at too slow a rate to make impossible the bootstrapping process of price increases described above.

Within a year's period changes in demand or in costs may be of three different sorts. They may conform to a typical, seasonal

¹⁵ Subject to the approval of the Coal Division, marketing agencies and agreements between marketing agencies are exempted by the act from the antitrust laws.

¹⁶ Removal of increasing amounts of coal from the jurisdiction of the coal act might render it more difficult to enforce the minimum prices and hence endanger wage scales. However, insofar as the corporations purchasing "captive" mines are regulated public utilities or are not in strenuous competition with companies buying coal subject to the act, this result is not likely to follow.

pattern recurring every year; they may represent abnormal short fluctuations departing from the typical seasonal behavior but unrelated to year-to-year changes; or they may constitute the beginning of a change that takes place over a period longer than a year. The coal act provides that the district boards in proposing minimum prices shall propose price variations related to "seasonal demand," but "seasonal changes" in weighted average cost are specifically excluded as a factor justifying a change in minimum prices. The phrases "seasonal demand" and "seasonal changes" are not defined. The plain implication seems to be that they both relate to the clear pattern of typical seasonal fluctuation in demand and production in this industry in each year. Some districts which supply substantial quantities of coal for domestic consumption, in which this seasonal pattern is most marked, have proposed seasonal discounts during the late spring and summer. This is, of course, desirable as a means of diminishing fluctuations in output, costs, and employment. Moreover, seasonal discounts, i. e., different prices at different periods of the year, may be necessary to obtain the maximum amount of consumption consistent with approximate equality between average price and average variable cost. The act gives no criteria for the number or amplitude of seasonal price variations.

The law seems ill-adapted for price changes within a year arising from changes in demand of the other two sorts. If the phrase "seasonal changes" in weighted average cost were interpreted to mean any change in costs which occurred in the course of a few months rather than from year to year, this would rule out fluctuations in minimum prices within the year, other than those which reflected the existing schedule of seasonal discounts. In any event the necessity of basing changes in the level of minimum prices on proof of a change in weighted average cost and the probability that the slow process of hearings will be used to establish such proof, render it likely that few, if any, changes in the fixed level of minimum prices will be made at intervals of less than a year.

With changes in demand that depart from the usual seasonal pattern it is possible that fluctuations in minimum prices would enable equalization of average price and average cost in the year with a somewhat larger consumption than would exist with constant minimum prices. There is no presumption that this would be so, and hence no presumption, on this score, in favor of varying minimum prices during the year. Only intensive study of demand behavior could answer the question.

Much of the foregoing can be summarized by saying that minimum price fixing in the coal industry can promote the objectives of decent wages and maximum economic consumption if the economic standards used in price fixing result in enough reduction in the number of working mines so that all of those remaining in operation receive in most years revenues at least sufficient to recoup the variable operating expenses, if the regulatory agency exhibits a high order of judgment and of skill in applying the standards, and if the industry cooperates satisfactorily. It is to be doubted that the cost standard of the present act, the undefined considerations for designing intermine and inter-district price relationships, and the lack of criteria and of machinery for short-time price variations will enable attainment of these objectives.

Up to this point in the discussion of coal price-fixing maximum economic consumption has been conceived as the largest consumption that will return to operating mines their average variable costs (or increment costs if these are higher), given existing wages and techniques of operation. The discussion has also proceeded without reference to conservation. If unemployed miners, whose maintenance represents an overhead cost to the community, cannot be employed in producing anything else that is worth while to the community, it is clear that the true cost to the community of using them in producing coal is less than the wage rates paid by coal firms. On this reasoning maximum economic production and consumption would exist only with coal prices appreciably below those which would return the total of wages paid (at present wage rates) and other expenses that are variable from the standpoint of private firms. Since discussion of these matters and of conservation involve consideration of the level of use of resources in the whole economy they will be deferred to a later section.

The Coal Act of 1937 empowers the regulatory agency to fix maximum prices for coal, f. o. b. mines, in any district when this is deemed necessary to protect consumers against unreasonably high prices. The standards prescribed are the following:

Such maximum prices shall be established at a uniform increase above the minimum prices in effect within the district at the time, so that in the aggregate the maximum prices shall yield a reasonable return above the weighted average total cost of the district: *Provided*, That no maximum price shall be established for any mine which shall not yield a fair return on the fair value of the property.¹⁷

The proviso seems to be controlling and it may conflict with the reasonable return standard. For the standard the district is the unit; for the proviso, the mine is the unit. If the whole section should be taken to mean that no level of maximum prices could be fixed in a district which would make it impossible to fix maximum prices for any one operating mine in that district that would yield a fair return on the fair value of the property of that mine, then the fixing of maximum prices so as to give in the aggregate merely a reasonable return above the weighted average cost of the district might be rendered impossible. Without knowledge of the fair value of each coal mining property, it would be difficult to ascertain whether a certain set of maximum prices would yield a fair return on that property, and the ascertainment of fair value is a matter of years.¹⁸ Protests would give rise to almost endless litigation. Thus, high-cost mines, both new ones that might have just entered production attracted by rising prices, and old ones near exhaustion, might be unable to earn a fair return except with a level of maximum prices that would give exorbitant profits to most mines. The legal maxima might have to be much higher than the mines would ever charge in practice.

In the absence of strong monopoly control or of a rapid, great increase in demand for coal there would seem to be no need for maximum price fixing, because competition would prevent prices from rising above the increment costs of additional output. It is conceivable that the growth of marketing agencies and of agreements between them might change a highly competitive situation into a monopolistic

¹⁷ It will be noted that the proviso is poorly worded. Literal interpretation of "no maximum price" would be no maximum price for any individual size, grade, or kind of coal; but that would be ridiculous.

¹⁸ It is here assumed that "fair value" means fair present value according to the interpretations of the Supreme Court to date.

one for some markets. If this happened and maximum prices were set so as to yield a fair return to high-cost mines that had been attracted into production, maximum price regulation would be powerless to prevent prices that were unnecessarily high and production of some quantities of coal by the new entrants that could be produced more cheaply by mines previously in the field.

But the coal division has a more effective weapon than maximum prices to deal with this situation. Marketing agencies and agreements between them are exempted from the antitrust laws only when they are approved by the coal division. Such approval is conditioned (among other things) upon a finding by the division that the agency or agreement "will not prevent the public from receiving coal at fair and reasonable prices" and "have agreed to observe the * * * maximum prices" set by the division. Approval may be revoked upon a finding that these requirements have been violated. Evidently the division could set maximum prices and require their observance as a condition of original approval or nonrevocation of approval. Moreover, the possibility exists that the phrase "fair and reasonable prices" might be interpreted to mean something different from the standard and proviso for maximum prices, noted above, when used merely as a condition of exemption from the antitrust laws accorded to a marketing agency or agreement that may voluntarily be entered or not, as producers desire.

Maximum prices are to be set "at a uniform increase above the minimum prices," and the latter must, of course, be raised with every increase of more than 2 cents per ton in weighted average cost. Thus, as indicated in part III, it appears that the maximum price fixing provisions of the act would be difficult, if not impossible, to operate.

With a large, rapid increase in demand, such as may occur in a period of rapidly expanding industrial activity and rising prices, the provisions of this act for maximum price fixing might be ineffective, because of the conflict between the standard and the proviso. This would be so if new high-cost producers flocked in and prices were set high enough to give them all a fair return even though a large part of their output could, in fact, be produced more cheaply by others.

Finally, it may be noted that the provisions for maximum price fixing do not enable the regulatory agency to prevent increases in prices that accord with increases in wage rates or other cost items.

CHAPTER VII

THE STRUCTURE OF PRICES—OBJECTIVES AND STANDARDS

Questions concerning the structure or pattern of prices paid by different consumers are closely linked to problems of the relations between investment, incomes, and the average price or general level of prices in a firm or industry, but there is a distinction between them. The general level of prices, or average price, is built up from individual prices, and changes in the level come about most frequently by changes in particular prices which at the same time often alter the price structure. Of especial importance is the fact that the amount of consumption and the amount of net income attending a given average price or level of prices may differ substantially in accordance with different patterns of individual prices to various groups or classes of consumers.

Prices for a particular commodity may be uniform to all consumers, either at the point of consumption or at the point of production or at some other point. Or prices may differ, either out of proportion to or in exact correspondence with the ascertainable differences in costs of serving various groups of consumers. Where different products or varieties of a basic product are sold by the same firm, prices may reflect differences in costs between the various items, on the one hand, or the differentials may exceed or fall short of the cost differentials.¹

Four broad objectives in designing a price or rate structure seem worth distinguishing: Some particular amount of income, some ideal of fairness, maximum economic consumption, some benefit to a particular group of consumers.

The first aim may be to achieve a particular level of profits or of wages, or both. Thus it may be desired to attain maximum possible profits, or an ordinary return on some measure of investment, or a minimum living wage for a certain number of employees. It is well known that in many instances the maximum gross sales revenue of a firm or an industry can be obtained only by charging different prices to different groups of consumers. This is so wherever the maximum revenue from one group of consumers is obtainable with a price that differs from the price which will yield the maximum revenue from a second group of consumers. Under such circumstances either profits or wages, or both, can be larger with differential pricing than with uniform prices to all, provided it is possible to separate the two or more groups of consumers in such a way that those charged higher prices cannot transfer themselves into a class charged lower prices and that those charged lower prices cannot resell the product or service to consumers in classes charged higher prices in such a way as to reduce the seller's net return. Experience shows that transfer of consumers

¹ The Robinson-Patman Act, which applies to unregulated industries engaged in interstate commerce, prohibits price differentials in excess of ascertainable differences in cost when the effect of such differentials may be to injure competition.

from one class to another can be minimized by classifying customers according to use of the product, by function (e. g., wholesalers versus retailers), by place or time of consumption, or by size of purchase. Barriers to resale occasionally exist in the sales contract and are also present wherever transport equipment would be needed, as in the case of gas or electricity.

Where differential prices can be maintained they will often yield larger profits than uniform prices, if no units of the product are sold at prices below the direct cost of producing them; that is, in technical economic terminology, their respective increment costs.² Conceivably there may be more than one particular pattern of prices which will yield the same maximum amount of profits.

In many instances profits representing an ordinary return on dollar investment (or some other particular amount of profits) can be secured either with uniform prices to all consumers or with one or more sets of differential prices to different groups of customers. If some purchasers, who would not pay more, are charged prices below the average unit cost (including the ordinary or desired profit) but above the increment cost of serving them, then the prices to other groups can be lower than they would need to be if uniform prices were charged to all. In other words, low prices that induce some consumption that would not otherwise occur, which contribute something to the fixed aggregate overhead, enable some reduction of the higher class prices. Some customers paying higher prices may be benefited by sales to others at lower prices which contribute to the overhead, if regulation is effective enough to ensure that the former obtain price reductions.

Another possibility, however, is setting prices to one or more groups below the actual added costs of serving them. In this case their consumption not only contributes nothing to the particular sum of profits aimed at, but other groups must pay higher prices, if the desired profits are to be realized, than they would need to pay if no customers were served at prices below these costs.

Thus in many cases it may be possible to secure a particular desired sum of profits (short of maximum profits) by uniform prices to all, by one or another pattern of differential prices no one of which fails to cover increment cost, or by one or another pattern of differential prices some of which are below the increment costs. To regulatory authorities bent merely on assuring a given sum of profits it will be immaterial which of the various alternative price structures is put into effect.

However, it may be impossible with uniform prices to obtain ordinary profits on dollar investment, or even profits sufficient to attract new capital. This situation exists when demand is not large enough relative to the size of the existing investment. In this condition differential pricing will be required if the desired profits are to be realized.

This discussion of the relations between price structures and incomes has been put in terms appropriate to the simple case in which a company produces but one article or service at a cost which is the same in serving all consumers; it also holds true for the more complex cases where costs of serving different consumers differ somewhat or

² See p. 414. Editor's note: The term is used by economists to mean the direct cost of adding one unit of production, without regard to overhead. Increment cost is by no means simple to compute in practice.

where several products are produced at differing costs. In such cases the equivalent of uniform prices are prices that contribute uniformly to earnings, for the essence of differential pricing is disproportionate contribution to earnings on capital.³

A second possible aim which regulatory agencies often consider in shaping the price pattern is to make prices "fair" as between all consumers or "fair" as between producers. Standards will vary, of course, in accordance with different notions of fairness. Fairness to all consumers may be interpreted as one price to all even where costs of serving them are different; or it may be conceived as differences which merely accord with differences in costs. Reductions in prices to eliminate unnecessary earnings may be considered equitable as between all consumers only if they are spread evenly among all classes. The notion that fair treatment of different consumers requires preservation of past price relations emerged especially when some of the customers, at least, are competing businessmen. The same sort of idea is often advocated as a standard of the fairness of the price structure as between producers.

A third objective in designing price or rate structures is maximum economic production and consumption, which is considered in this report to mean the largest consumption which will return the increment costs, plus whatever additional revenue, if any, is necessary in order to maintain expectations that will attract capital, in the case of an industry with growing demand. The basic standard here is that the price of every unit of product or service must at least cover the addition to expense occasioned by production and sale of that unit. A price below this "increment cost" signifies that the worth to the customer is less than the direct outlay which must be incurred to produce and sell him a unit of product or service.

If new capital is not needed because demand shows no signs of increasing, the prices of all units and products sold by the firm should be equal to their ascertainable increment costs. Where a flow of new investment into the firm or industry is necessary from time to time in order to meet most efficiently a growing demand, prices equal at all times to these increment costs may provide profit expectations sufficient to attract investment, and there would be no need for any prices to exceed these costs. The only differences in prices to consumers will reflect differences in increment costs of serving them, and their contributions to earnings will be uniform.

In many instances, however, it is probable that prices equal to increment costs will not provide expectations of profit sufficient to attract new investment. Some prices, at least, must then exceed such costs. It has been noted above that there may be several patterns of prices that will yield a given sum of profits. Here the problem is to find that particular pattern which in yielding the necessary profits will at the same time give larger utilization of equipment and consumption than any other. Maximum consumption will be attained only if the higher prices are charged to consumers whose volume of consumption will not be much less at the higher prices than it would be at prices closer to or equal to increment costs. A desirable price pattern is one which would insure maximum possible consumption by

³ The matter may be put more precisely as follows: Differential pricing is absent when every price yields, in addition to increment cost (including capital charges or profits on equipment used only to serve the particular customer or group of customers), an equal amount of revenue per unit of use of the equipment used to serve all customers in common.

each group of consumers, consistent with the maintenance of the necessary profits.

Such a price pattern could never be precisely attained because of lack of knowledge of consumer reactions to price changes. Study of the nature of demands from different groups of consumers, however, and observation of results of price changes should enable design of a price structure that would approach the goal. Balance in prices to different classes of consumers should also be aimed at when prices are reduced to eliminate excess profits, as consumption expands or as costs decline for other reason. To achieve maximum consumption, prices should be reduced to consumers whose consumption will be most increased thereby; and prices to any one group should never be reduced when a reduction to some other group would give a larger increase in volume of consumption per unit of diminution in profits.

A fourth possible end in fashioning a price structure is to benefit one or more particular groups of consumers. An unprosperous industry may be given lower prices for transportation or other utility services than are paid by prosperous industries. Low-income groups may receive special low prices while others pay the "regular" price. Or prices may differ between several income groups, as in the case of medical services. Standards for this fourth class of objective will run in terms of the kind and the amount of benefit to be conferred and the way in which any attendant deficits are to be recouped.

These four sets of objectives are in substantial measure incompatible, and the actual practice of Government price control has usually exhibited a combination of two or more of them.

One frequently encounters the statement that as utilization of a large fixed investment improves, the highest prices or rates should be progressively reduced. If the aim is solely maximum economic consumption and utilization of equipment, this is by no means necessarily so. Plainly it is not so if reduction of some of the intermediate rates will give larger increases in consumption and utilization.⁴ Similarly, the contention that the existing spreads between electric rates to residential consumers and rates to large power users should be drastically reduced⁵ probably represents at least in part either a misconception of the standards for maximum economic consumption or a preference for considerations of equity over those of maximum consumption. If low rates to large power users (not below increment costs) enlarge total consumption more than lower rates to domestic consumers than those now in force, the objective of maximum economic consumption is obviously more closely approached. It often seems to be overlooked that insofar as low rates to industrial consumers are reflected in lower prices of industrial products than would otherwise exist, consumers as a whole may benefit.

⁴ If, when full utilization is reached, increment costs become equal to full average unit cost including the necessary minimum earnings, then differences in rates should disappear except as they just measure differences in costs of serving different consumers. This condition should be reached by a process of lowering the higher rates and increasing the lower rates. Lack of knowledge of the behavior of increment costs in public utilities and of the degree of "lumpiness" required, by technological conditions, in expanding investment as full utilization of existing plant is approached, render it impossible to determine whether the condition in which all prices or rates are equal to increment costs represents a practicable possibility in these industries.

⁵ See the Electric Power Industry, by John Bauer and Nathaniel Gold, Harper Bros., 1939.

CHAPTER VIII

THE STRUCTURE OF PRICES IN ELECTRICITY, MILK, AND BITUMINOUS COAL

ELECTRICITY

In the regulation of electric rates much less attention seems to have been devoted by commissions and courts to the pattern of rates than to problems of the general level of rates and the return on investment.¹ Most of the books on public utility regulation while treating at some length the standards developed by courts and commissions in regulation of the general rate level have little to say about standards for the pattern of rates. The most extensive treatise on the subject, *Guiding Principles of Public Service Regulation*, written in 1924 by Henry C. Spurr, editor of *Public Utility Reports*, contains in its 700 pages scarcely any treatment of rate patterns.

According to Ellsworth Nichols' study, *Public Utility Service and Discrimination*, published in 1928, courts and commissions have developed notions both of fairness and of economic efficiency insofar as they have dealt with questions of differences in rates to different consumers. In applying statutes prohibiting "unjust" discrimination or "undue" or "unreasonable" preference they have drawn partly on common law precedents. The essence of the legal notion of unfair discrimination in rates seems to be differences in rates to customers purchasing the same service or product under substantially the same circumstances. Such differences are held to constitute unfair or undue discrimination either because they bestow an advantage on particular individuals or groups not open to others, who may be competing with the former, or because the low rates to favored consumers necessitate higher rates to other customers than they would otherwise need to pay.

The development of service classifications and differential pricing according to classification, in order to increase profits and to enlarge consumption, forced regulatory authorities to attempt a distinction between low rates which throw an added burden on other customers and low rates which enable reduction of the burden on other customers because they result in additional consumption, not attainable at higher rates, that contributes something to earnings.

It appears that most commissions have failed to develop any clear principles for designing the pattern of rates. The general position that seems to be taken by most commissions as well as by writers on the subject is that both cost of service and value of service must be given consideration and that the objective should be a mixture of enlarged consumption and equity between consumers. It is repeatedly averred that the fixing of individual rates is a matter of judgment,

¹ See, for example, B. N. Behling, *Competition and Monopoly in Public Utility Industries*, p. 158.

but it is rarely said that judgment should be guided by clear principles.

In the past two decades more attention has been given to measurement of what is here called increment costs and to the development of devices and theories of allocating the common capital costs between the different classes of consumers. Many questions of methods of allocation and of how much of the common costs should be allocated to the different classes of service for purposes of rate making still remain highly debatable. With enlargement in the uses of electricity and gas and growth in inter-industry competition, these problems, as well as problems of demand, have become more complex. Regulatory authorities have not devoted much attention to modification of rate structures on the basis of extensive studies of demand conditions. Owing to preoccupation with the rate level problem and to inadequate funds or lack of interest, most commissions seem to have been content to regard the design of the rate structure mainly as a problem of utility management.

There seems little doubt that utility managements have been slow to develop rate patterns conducive to maximum consumption. With rates that yielded generous earnings, which were justified by the prevailing court doctrine or went unchallenged because of the ineffectiveness of regulation in many States, utilities have tended to wait for consumption to increase before lowering rates, and to wait for clear evidence that a change in rate structure would improve consumption without impairing profits before making any such changes. As noted earlier, the recently introduced objective rate represents a method of experimenting with lower rates for one or another class of service without impairing existing earnings.

Mr. Lewis' reports suggest that the commissions in Wisconsin, New York, and Illinois have been more occupied with rate forms than with the problems of how to apportion among the various classes of customers the calculated overhead equal to a "fair return." All three commissions have endeavored to simplify and standardize rate forms and to put into practice forms which force each individual consumer to pay the full costs of distributing equipment used solely by him and the increment cost of the amount of energy that he consumes. The Wisconsin commission has been working toward a State-wide uniform two-part rate form for residential and commercial lighting services. This rate form includes a fixed customer charge, to cover the costs of the utility's equipment on the premises and the costs of billing, collection, etc.; and a separate charge for energy consumed. The commissions in New York and Illinois do not favor such customer charges for residential users. They attempt to achieve the same end by a one-part block rate in which the total bill for the first block of energy constitutes a minimum charge. All three commissions have endeavored to eliminate from rate forms for residential customers all types of demand charge—that is, a fixed charge related to some measure (usually crude) of the customer's maximum demand on the system at any time. This demand charge is ordinarily used for the purpose of assessing the capital costs of generating and transmission equipment among consumers on the basis of relative maximum demands.

For large power users the Wisconsin and New York commissions favor a two-part rate including a demand charge, according to the

customer's maximum demand placed on the system as measured by a demand meter, and, in addition, an energy charge.

The three commissions use block rates, which encourage additional consumption at lower rates. They have not, however, adopted the "objective" rate form² as a permanent device although it is evident that the objective rate tends to produce larger consumption for a given amount of net earnings. The block rate represents a method of charging to an individual consumer a high rate for energy put to one use, such as lighting, for which the amount consumed will not vary much with the price, and lower rates for electricity used in other ways in which consumption will expand with lower prices. Even if several optional block rates are offered to the class of residential consumers, it is obvious that they can reflect but a few of the actual differences in demand patterns of these customers. The objective rate has the merit of automatically creating a particular block adjustment for each consumer adapted to his demand characteristics as evidenced in the past. The amount which he has been consuming at the ordinary block schedule constitutes a broad block for him in particular. As his consumption increases beyond this the rate breaks sharply. In other words a marked rate break occurs just at the point where he had stopped increasing his consumption. A simple block rate can be adjusted only to broad averages of the demand behavior of all consumers in a class. The objective rate is a neater instrument for dissecting the pattern of rates into particular schedules to fit the demands of particular consumers in such a way as to increase the total volume of consumption that will return a given total of net earnings. And there is no reason why additional objective rates should not be added from time to time provided the intervals between their announcement are not too short to induce consumers to wait, before increasing consumption, until a new objective rate is put into force.

It is obvious that the use of objective rates involves discrimination in the sense that two individuals consuming the same amount of energy may pay different average prices per kilowatt-hour. However, this kind of discrimination is necessary if maximum economic consumption is to be attained. The "value of service" to domestic users is different for different uses, and for each use the value of particular quantities of electricity varies somewhat between individual consumers.³

The design of the rate form may facilitate both assessment against each customer of those costs for which he is specifically responsible and whatever particular allocation of the common costs among consumers the commission desires. Plainly, however, it is the amount of the rates themselves which determines both of these things. Each of the commissions in these States attempts to make sure that no consumers are served at rates below the ascertainable increment costs of serving them. But none of these commissions seems to have any clear criteria by which the overhead is distributed between the several classes of consumers. Rates to commercial users are set higher than rates for domestic users on the presumption, common to most commissions, that the demand for the former service is very

² See p. 419 for further discussion of this rate form.

³ Cf. C. O. Ruggles, *op. cit.*, p. 221.

largely "on peak" with the result that the total required capacity of the utility is much more influenced by this demand than by others.

Rates to large industrial users of power are ordinarily much lower than rates to the other two principal classes of consumers. These low rates are usually held justifiable on the grounds that industrial consumption is largely "off-peak," that the added business increases total consumption and permits lower rates to other classes of customers, and that these rates have to be low in order to induce industrial enterprises to forego development of their own power or purchase of by-product power from other industrial companies. Rates to large industrial users are either left more or less unregulated, as in Illinois, or are partially regulated with the purpose of ensuring that they are not lower than they need be to get the business.

In the case of these three commissions it does not appear that rates are made on the basis of cost allocations by which all or nearly all of the common costs are specifically allocated to particular services. Such a procedure would be likely to keep consumption far below the desirable maximum.⁴ The pattern of rates is not altered in any way that would impair receipt of the fair return, and no rates are set so low that they will presumably not cover increment costs. In maintaining or altering the existing pattern of rates the commissions are motivated by their ideas of equitable balance, by the relative volume of protests from different classes of customers, and by the desire to improve utilization and consumption, as well as by the necessary condition of permitting an overall fair return. Regard for considerations of "fairness," as evidenced by their own practices or by the volume and character of protests, and their failure to make and use intensive studies of the probable relations between lower or higher rates and volume of consumption in different classes, appears to indicate that the commissions have not yet discovered and put into effect rate structures that would give maximum economic consumption.

The typical procedure in estimating the effect of rate reductions on income by applying the reduction per kilowatt-hour to the consumption of the previous period means that excess income is not removed by a process of lowering rates to those consumers whose consumption will increase most per unit of income removed, unless this result is achieved by chance.

On the important matter of the content of rate structures—the spreading of the fair-return overhead among the several classes of consumers—little more can be said of the policies of these three commissions than that they take into account ideas of fairness, volume and nature of protests, and utilization of capacity, and apply their judgment without any particular fixed guiding principles, as far as can be ascertained.

In the design of the rate structure, T. V. A. does not seem to have made any special advance over the policies of the three commissions studied in this report. Its wholesale rates and rates for direct sale to industrial users are composed of fixed demand charges and block energy charges. Contracts with municipalities and cooperatives which purchase energy from T. V. A. for resale contain clauses in which the Authority prescribes the forms and amount of charges at retail. Retail rates both to domestic and commercial consumers are

⁴ Unless, indeed, costs were allocated chiefly by computing the several expected amounts of revenue above increment costs that would be received from the various classes when rates were such as to give maximum consumption.

block rates with a minimum charge equal to part of the first block. The fixed demand or customer charge used in Wisconsin, which is probably more promotional than the minimum-bill block form, is employed by T. V. A. only in rates to industrial consumers.

The general pattern in which the overhead is spread among the three main classes of consumers is the conventional pattern of the commissions—lowest rates to large industrial users in order to obtain their business and highest rates to commercial users. The act directs that particular consideration be given to the small domestic consumer. Accordingly the charge for the first block of energy for domestic consumption is exceptionally low. There seems to be nothing to suggest that T. V. A. has given more attention than the most effective State regulatory commissions to the problem of the most desirable pattern of apportioning overhead among the different classes of customers; although its intensive consumption studies and its greater freedom for experimentation with the rate structure may later lead to advances in this field. So far, there is no particular reason to think that T. V. A. has hit upon the pattern of rates that promotes maximum economic consumption.

MILK

It will be recalled that the standards for the height of the prices of fluid milk relative to the prices of manufacturing milk have been treated in detail in an earlier chapter devoted to standards for the general level of prices. In most of the instances of Government control of milk examined in part II it appeared either that only one or two class prices were fixed or that very little attention was paid to the problem of standards for the relations between the different class prices.

In none of the six instances of public pricing of milk studied here, except California, were any standards discovered for the number of different class prices paid to producers. The cost standard in California seems to set automatically the number of class prices, usually two—manufacturing milk and fluid milk and cream. In each of these six cases at least two class prices exist, although in one instance, Oregon, the State fixes only one price, that of fluid milk and cream. The number of class prices varies from two in Oregon and in most markets in California up to a maximum of nine in the New York City market. Substantial variations in the number of class prices often occur as between different markets in the same State.

Of these six cases of government control, California alone exhibits a clear-cut statutory standard for the relation between class prices. In the case of Federal control, the administrative agency has developed something approaching a definite standard for the relation between class prices, and there is some indication that the Wisconsin control agency has recently moved toward a definite standard. In the other three States the picture is less clear. In general, it is probably true that, in all the cases studied in this report except California, the standards used are whatever the State authorities, or the producer organizations, or both think will maintain the most profitable price structure, given an uncontrollable price for manufacturing milk and existing limitations on the amount of production of fluid milk.

Federal Control.

In connection with Federal control of milk prices, Congress has provided no objectives or standards relating particularly to the pattern of milk prices. Presumably the general objective of raising farm income may be pursued and the standard of purchasing power parity may be applied either by varying the pattern of class prices for milk or not changing it, as seems to the administrative agency most effective and expedient. As was shown in an earlier section the A. A. A. soon adopted the policy of widening the price spread between class I milk and class III milk as the principal method of raising the average or "blended" price paid to producers for milk and, in consequence, raising producers' income. Apart from a few schemes, operated jointly by the Department of Agriculture and local relief authorities, by which milk is distributed free or at a low price to families on relief or on W. P. A., it appears that the only purpose for which the A. A. A. has altered the price structure has been to increase the average prices and income to producers.

The result has been to raise the prices in those markets under Federal control and probably to increase gross income of milk producers. It is difficult to determine whether production and consumption have been increased above what they would have been with narrower class price differentials. If farmers have increased their production to the point where the "blended" price is equal to their increment costs, they have been selling milk for manufacturing purposes at prices below the actual costs to them of getting it produced. This would mean that consumers of class I milk have been, in effect, subsidizing consumers of manufactured milk products. It is possible that those consumers who use larger quantities of manufactured milk products relative to their consumption of fluid milk have somewhat lower incomes than those who use larger amounts of fluid milk relative to their consumption of manufactured milk products, but it seems unlikely that the difference is great. Hence it does not appear that this would represent in any considerable degree the kind of price discrimination, such as that existing in the pricing of medical services according to relative income, which raises the standard of living of the lower income groups without much reducing that of the higher income groups.

Such a result would attend the charging to higher income groups of higher prices for milk and all milk products with correspondingly lower prices on all milk and milk products to lower income groups. It is possible that a price pattern of this sort might also enable both disposal of full capacity output of dairy farmers and maintenance of desirable producer incomes without Government subsidy.⁵

In Boston and Chicago the Department of Agriculture and local relief authorities have cooperated in schemes by which relief recipients receive fluid milk free or at a low price. In Boston the farmers are paid the full class I price for this relief milk while in Chicago the producers agreed to give relief milk a special class rating at 70 cents per hundredweight below class I. In Boston the milk is processed and delivered to milk depots by regular dairies who bid for low-cost contracts. In Chicago dealers deliver the major portion of relief milk to homes and a small part of it to milk stations. Relief families

⁵ It might, however, tend to diminish total employment of men, equipment, and savings in the whole community. (See below pp. 499 ff.)

receive the milk free in Chicago whereas in Boston they pay 5 cents a quart and W. P. A. families pay 7 cents a quart. The necessary subsidy to producers and distributors has been paid by the Federal Surplus Commodities Corporation or shared by this agency and the local relief agencies.

Schemes of this sort seem to have demonstrated that class I sales can be markedly increased by low retail prices, resting partly on savings in distribution resulting from restriction of services, without diminishing existing class I consumption at the prevailing standard prices. Although they involve two or three retail prices they do not constitute an instance where low prices to the lower income group are offset entirely by higher prices to higher income groups, for Government has made substantial payments to producers and distributors. These milk schemes and others such as free or low-price distribution of milk to schools and hospitals are similar in essence to the food stamp plan which is being applied to many other farm products in an increasing number of cities and counties. All involve the sale of designated farm products to low-income groups at prices lower than those charged to others and payments by Government to producers and distributors. The prices to higher-income groups have not been raised high enough to dispense with Government subsidy.⁶

State Milk Control.

As explained in an earlier chapter, the California law provides that minimum prices of fluid milk shall be based on the "economic relationship" of the price of fluid milk to the price of manufacturing milk. The language of the statute implies that the "economic relationship" means a price differential equal to the extra costs, such as those due to sanitary regulations and to provision of a more even supply throughout the year, of producing fluid milk as compared with manufacturing milk.

The California Department of Agriculture endeavors to fix such a price differential in each market after making studies of the costs of producing both fluid milk and manufacturing milk. In many markets the state has fixed only the price of milk used as fluid milk and cream. In the Sacramento market, however, the stabilization and marketing plan contains methods for prescribing minimum prices for four classes of milk. Usually the price of milk is the same whether used as fluid milk or fluid cream, evidently because the cost is the same.

The Oregon milk control board is endowed with no control over the prices or quantities of manufactured milk. It fixes only one price, that for fluid milk whether used in the form of milk or cream. It is not clear whether, in fixing the minimum price to be paid producers in a given market for their fluid milk, the board considers either the market price of milk entering manufactured products or the amount of fluid "surplus" going into that outlet. Evidently the limitations on entry and on production for the fluid market enable the price of fluid milk to be divorced in substantial measure from the price of manufacturing milk. Hence it is probably correct to conclude that State control in Oregon has avoided the problem of design of a class price structure by imposing output controls which insulate the fluid market from the manufacturing market. In the broad view this may result in a price structure that maximizes the profits of exist-

⁶This does not imply the opinion that they should be. See above note, p. 484, and below, pp. 499 ff.

ing fluid milk producers. The failure to differentiate the prices of fluid milk and cream may mean, however, that maximum profits are not, in any case, obtained.

In Wisconsin the number of different class prices has varied between different market areas. Milwaukee has had four classes—fluid milk, fluid cream, manufacturing milk, and relief milk—since the inauguration of control in 1932. Until 1939 the typical situation in most markets in this State was a uniform price for milk used as fluid milk and milk used as cream. In that year the minimum prices for milk used as cream were lowered in a number of markets due to a growth in cream receipts in these markets from areas formerly marketing manufacturing milk. Thus, in each of these markets a single price for fluid milk was replaced by two class prices.

Minimum prices for surplus fluid milk entering manufacturing outlets are fixed in Wisconsin according to formulas based on the prices of manufactured milk products, especially butter and cheese. The differences in formulas as between markets reflect differences in opportunities for surplus disposal. Evidently the purpose is to insure that distributors pay to farmers in each market area the best price obtainable for the surplus in manufacturing outlets.

During the years 1933–38 the retail price of fluid milk in Milwaukee rose more than the price of evaporated milk, continuing a trend established in the latter twenties, which tended to disappear in the ensuing depression. There is some indication that the percentage of families using fluid milk and the amount of family consumption of fluid milk per month declined slightly in the years 1934–39, while the corresponding percentages for consumption of canned milk increased appreciably.

Insofar as the Wisconsin department of agriculture and markets has been concerned with the design of the class price structure, it appears that it has endeavored to put into effect class prices which will increase producer incomes to some unspecified level. It may be that their goal is maximum profits possible without public control of entry or production.

In Indiana the milk control board has ordinarily set up three classes for producer prices. In all controlled markets in the State, class I milk includes both fluid milk and fluid cream. Class II milk usually includes milk used for flavored drinks, cottage cheese, ice cream, and evaporated and condensed milk. Class III milk is milk used in other manufactured products, chief of which are butter and cheese. Formulas based on the wholesale price of butter have been used to determine the minimum class II and class III prices. In the case of class III prices, at least, the formulas are evidently designed, as in Wisconsin, to insure payment to farmers of the best obtainable competitive price for surplus fluid milk. The standards employed in determining the relations between class I prices and class II and class III prices are not revealed by study of the policies of the milk control board.

Milk control in New York State, like that in the other States here studied, with the exception of California, is without legislative standards for determining the number of class prices or the class price relations. In specifying the number of class prices in a market, the division of milk control was apparently guided substantially by the existing class arrangements in that market.

During most of the time since public control was inaugurated in 1933, nine classes have been used in the New York metropolitan market, and a smaller number in up-State markets. Prior to 1937 five of these nine class prices were determined by formulas based on the open market prices of manufactured milk products such as butter and cheese. It does not appear what standards were used in determining the other class prices.

With resumption in 1938 of control in the New York metropolitan market, under a joint State and Federal order, all nine class prices were for a time determined by formulas. However, after the milk strike in the late summer of 1939, the class I price and three other class prices—representing milk used as fluid cream, condensed milk and frozen deserts, and cream for storage—were all increased appreciably above the formula prices, apparently in response to producer pressure for higher prices on these classes.

With the changes in the milk control laws in 1937 to encourage market self-government by bargaining agencies of producers and dealers, the legislature did not lay down standards for design of the class price structure.

With regard to the structure of retail prices to different groups of consumers there is little to be said. The underlying reports on State milk control present little evidence on this matter. Evidently the actions of control authorities in this sphere have concerned principally the relations between prices for home delivery and prices in stores and in milk stands.

During the period of retail price fixing in New York State, prior to 1937, price differentials were fixed between store sales and home delivery. Minimum prices for store sales were usually set at 1 cent per quart of milk and 1 cent per half-pint of cream below the minimum prices for home delivery. Between 1930 and 1938 home delivery sales dropped from 57 to 47 percent of total sales while store sales increased from 43 to 52 percent of total sales.

In Oregon, Indiana, and Wisconsin price differentials between home delivery and store sales have been abolished in large measure by the control agencies. It appears that they have been entirely eliminated in Oregon, although the Oregon statute specifically authorizes price differentials wherever cost differentials obtain. Indianapolis seems to be the only market in Indiana which still possesses such a differential, and there is similarly but one market in Wisconsin where this differential has not been eliminated. Differentials between the prices charged by milk stands in the environs of a city and town and the prices charged for home delivery have also been abolished in most markets in Wisconsin.

On the matter of price differentials between store sales and home delivery, California also provides a contrast with the policies of the three States just mentioned. The language of the California statute emphasizes that fixed minimum wholesale and retail prices are to be consistent with maintenance of "sufficient distribution facilities of the several types or methods commonly used by consumers."

BITUMINOUS COAL

The bituminous coal price structure must necessarily be complex, with or without Government price control. There are several different kinds of coal produced by mines with different seam characteristics.

Each kind of coal is produced in various qualities or grades, according to chemical and physical attributes. Different qualities occur in different mines and often in the same mine. Further, each quality of a particular kind of coal is produced in various sizes. The various kinds and qualities of coal occur in different quantities, and the costs of their mining frequently differ. The various sizes of coal emerge from the process of mining in proportions which can be modified to some extent, but the various sizes cannot be made available in all possible proportions at the same cost.

Thus some differences in price per ton between various kinds, qualities, and sizes of coal will "naturally" exist—whether pricing be the result of keen competition or strong monopoly control—unless it is entirely a matter of indifference to most consumers which kind, quality, or size of coal they use.⁷

A particular quality of one kind of coal may have the same value per ton to some consumers as some quality of another kind of coal. Moreover, within broad limits, the size of coal may be of no significance to some consumers, such as the railroads and by-product coke plants. It is evident, however, that most consumers are not completely indifferent with respect to kind, quality, and size of coal, in the sense that they will pay no more for one kind, quality, or size than another. This is demonstrated by the price differentials existing at times when the strong competitive forces in this industry have operated uncontrolled.

The coal price structure ordinarily exhibits price differentials explainable in considerable degree by these two conditions—the fixed or semi-fixed proportions in which various kinds, qualities, and sizes of coal can be produced, and differences in the strength of demand for these various kinds, qualities, and sizes. And price differentials based on these two conditions will be required for maximum economic consumption.

Since transport expense is large for coal—on total coal shipments by rail the average freight rate paid has for many years exceeded the average value of the coal f. o. b. mines—the prices received f. o. b. mines are substantially affected by freight rate adjustments. The railroads and the I. C. C. group the mines for purposes of setting freight rates. Although rates to a given market are equalized for mines in the same origin group and often equalized for several groups, many markets are served by groups taking different rates. Hence the prices received f. o. b. mine often differ between mines selling the same or a comparable kind, quality, and size of coal in the same market. Further, the same coal sold in different markets by one mine may return different prices f. o. b. mine, reflecting varying amounts of freight absorption.

The Coal Act provides that minimum f. o. b. mine prices shall be set for all kinds, qualities, and sizes of coal for each mine in the country.⁸ When it is considered that most mines sell several sizes and several qualities, and often more than one kind of coal, and that each mine sells each of its products in several, perhaps many, markets, it is readily appreciated that altogether several hundred thousand prices must be fixed.

⁷In economists' vernacular there are substantial elements of joint supply in coal production, the capacities in which the various kinds, qualities, and sizes can be produced being in considerable measure fixed by unalterable elements.

⁸Except those few whose sales exercise no substantial effect upon prices of coal sold in interstate commerce.

The cost standard of the Coal Act for the general level of prices in a minimum price area is a definite standard. The act contains, however, no definite, clear-cut standards for the pattern or structure of individual prices. The individual prices fixed f. o. b. mines "shall reflect, as nearly as possible, the relative market value of the various kinds, qualities, and sizes of coal, shall be just and equitable as between producers within the district, and shall have due regard to the interests of the consuming public." There is also provision for price variations on account of different "values as to uses." Coordination of prices of coals from different districts sold in a common market must result in prices that are "just and equitable" between districts, that preserve "existing fair competitive opportunities," and that reflect "relative market values" of the various kinds, qualities, and sizes of coal considering, among other things, "values as to uses" and "the competitive relationships between coal and other forms of fuel and energy."

Evidently the price structure must accord with two quite general criteria which are not clearly defined: Relative market values and fairness to all producers and to consumers. The manner of statement in the law implies that these are criteria of coordinate importance, but this is not made explicit. The results would probably differ according as they were so regarded or as relative market values were considered a test for fairness, or fairness was held to be a test for relative market values. The phrase "relative market values," without further criteria specifying which particular relative values, is no standard at all. By itself alone it is merely a synonym for relative prices. As often as relative prices change there is a change in relative market values.

The vagueness and generality of statement of these two sets of considerations would seem to permit either maintenance of essentially the same pattern of prices or introduction of appreciable changes in the price structure. Changes could probably be justified on grounds of changes in demand or in use values, or on grounds of fairness between producers or between different groups of consumers. In other words, the regulatory agency is directed to fix the pattern of individual prices according to considerations so vaguely stated that it must of necessity decide for itself among a range of alternative objectives and standards.⁹ The only definite rule is that no pattern can be set which will not equalize current average price and weighted average cost of a past period adjusted for subsequent changes. Doubtless there are several different patterns of prices which will conform to this rule.

Once the structure of minimum prices is originally fixed, the regulatory agency may "from time to time, upon complaint or upon its own motion, review and revise the effective minimum prices * * * in accordance with the standards" set forth to govern the original establishment of prices. And whenever the general level of prices is raised or lowered because of a change in weighted average cost, the question of a change in the price structure can arise, unless the phrase "increase or decrease the minimum prices accordingly" is held to mean a uniform change in all prices, and this is unlikely.

⁹ See Appendix G to Part III for a statement of the way in which the Bituminous Coal Division has interpreted these standards.

In the original establishment of minimum prices it might be considered that preservation of price relationships previously existing would constitute the best method of reflecting relative market values and making minimum prices just and equitable between producers. In substantial measure this seems to be the position taken by the Commission and its successor, the Bituminous Coal Division. But when market conditions change appreciably as between different kinds, qualities, or sizes of coal or as between different uses for the same coal, the regulatory agency will be forced to develop more definite objectives and criteria to implement the phrases of the law that pertain to the price structure.

As pointed out in an earlier section, one objective of the Coal Act is to keep total revenue of operating mines from falling below total variable expense. Both the original pattern of minimum prices and subsequent changes in it must accord with the cost standard laid down as a means to this end. But the act does not direct that the regulatory agency shall put into effect the pattern of prices which will best promote equalization of revenue and expense with the lowest possible average price—that is, the average price that gives maximum economic consumption. To achieve this objective, prices would have to be set in accordance with the conditions governing the proportions in which the different kinds, qualities, and sizes of coal can be produced and their respective demand conditions, and changed from time to time as these conditions changed. This means that the common joint expense for different varieties of coal should be recouped by higher prices for those varieties, consumption of which is less sensitive to price, and lower prices for those, consumption of which varies much with price. It is possible that standards in these terms would be held to be consistent with the requirements as worded in the present law, but the evident emphasis on preservation of past relationships may make this doubtful. It appears, however, that in raising minimum prices to meet the cost standard the Coal Division has in some measure put the price increases on kinds, qualities, or sizes, or in particular localities, where substitution of other energy sources will be minimized.¹⁰ As pointed out earlier, the law does not seem to direct that the effect of price changes on consumption be considered, except with respect to the coordination of relative prices between districts selling in a common market.

A change in the pattern of prices at any given time, without any change in the relative demands for different varieties of coal, or continuance of the same price structure in the face of alterations in the relative demands for different varieties, may result in a change in total consumption and hence a change in weighted average cost. If consumption is enlarged, there will be no serious problems; but if consumption falls and average cost increases because of the altered pattern of prices, this will precipitate the spiral of price increases and decreases in consumption described in an earlier section. Here, again, it appears to be unfortunate that the law does not specifically call for consideration of consumption and demand characteristics in setting and altering the structure of prices.

The law permits the same kind, quality, and size of coal to carry different minimum prices for different consumers in the same geographical location when the use to which they put the coal differs.

¹⁰ See appendix G to Part III.

For example, the same coal may be sold to domestic users and industrial users in the same city at different prices. No specific criteria for price differences according to use are given in the law. This type of price difference is a device to raise the total revenue received; it will not promote full utilization of the mines and maximum economic consumption which will at the same time at least yield variable costs of mining the coal. The group of consumers charged the higher prices will presumably use somewhat less coal than they would at lower prices, although in the case of domestic consumers a small difference is not likely to be important in the short run. The total costs of a given size of coal can be covered by uniform prices to all consumers in the same location.

This case differs from the case of different prices for varieties of coal that have to be produced in certain fixed proportions—for example, lump and slack—and sold to different groups of consumers. In this situation, to obtain the largest economic consumption prices must be adjusted to take account of the differences in demand from these various groups of consumers. These differentials are necessary to recoup the total of the joint common expense and at the same time get the lowest average price for all such varieties. For any one kind of coal, however, the supply can be made available to different users in any proportions. As already indicated, maximum economic consumption of such coal will be attained when prices are uniform to all consumers in the same location and when they are no higher than necessary to return its costs.¹¹

Non-seasonal differences in prices for the same coal to different consumers in the same location seem desirable not as a regular thing but only in the case of sporadic surpluses that cannot otherwise be disposed of.

The Coal Act affords no criteria for differences in price f. o. b. mine for the same coal sold in different geographical markets nor for the determination of "common consuming market areas." Similarly, seasonal discounts are permissible, but no standards for them are set forth.

With regard, then, to the pattern of the price structure, everything depends on the standards developed by the Coal Division and the courts, since there are no specific standards contained in the present law.

¹¹ More precisely this means a uniform price that covers the special expenses of this variety of coal and the proper contribution above that to the joint expense of producing and selling this variety and other varieties that are produced with it in fixed proportions—the proper contribution being determined according to the principle that the total joint expense is to be recovered in such proportions as will give the largest possible production and consumption.

CHAPTER IX

PRICES IN RELATION TO GENERAL DEPRESSION AND RECOVERY—OBJECTIVES AND STANDARDS

When there are large quantities of unemployed men, equipment, and savings in depression, whether of brief or long duration, such as the past decade has witnessed, public price control should endeavor to minimize depression and to promote recovery wherever that is possible. Public policy in control of industries may in large measure neglect depression problems and may continue to be related principally to objectives framed without reference to problems of depression and recovery. This was true in some instances in the thirties. This does not mean, of course, that policies of control actually have no effect on the severity and duration of depression or on its relative impact on different groups; the maintenance of traditional lines of control in a rapidly changing economic situation may, in itself, have a pronounced effect.

There are a number of possible objectives of price control during depression and recovery. The first two of these involve merely adjustment to depression conditions, not promotion of recovery. These two reflect considerations of fairness or equity rather than concern for the efficiency of the whole economic system. The other four are related to promotion of recovery.

(1) The first objective is the maintenance or increase of incomes of some selected groups within an industry—producers, labor, middlemen—merely to ease the impact of depression on them, with no regard for the effect on the general severity of depression or on recovery. Possible standards are the absolute amount of income received in some previous period, certain relations or parities existing in a former period between the amount of income of one group and that of others, or a "normal" income derived by adjusting the absolute income or the parity income of a previous period for intervening fundamental changes of a non-depression character, in cost or demand conditions. Or standards may run in terms of rates of income per unit of investment or of work done, or in terms of purchasing power parities as measured by price relations or by income and price relations.

(2) Second, adjustment of prices in a given industry so that consumers as a whole spend on its product the same proportion of their incomes in depression as in prosperity. If income data were available a standard might be formulated in terms of reductions in price proportionate to some average of the reductions in incomes of consumers. Alternatively, price reductions might be made proportionate to reductions in a cost of living index. Neither standard would necessarily approximate the end in view, but it would be difficult to ascertain directly the price reductions which would achieve this objective.

Mitigation of the impact of depression on particular groups through pursuit of objectives such as these two might retard or promote recovery or exercise a neutral influence on it; there are no a priori reasons favoring any one set of effects upon recovery.

There are many ideas concerning the way in which to promote a larger employment of economic resources in the whole community during depression. This results in a variety of possible objectives related to this general end, of which four seem most significant.

(3) The first of this type is maintaining or raising the money income of one or more groups in a particular industry to prevent a drop or to bring an increase in the volume of their spending on other things. This has been one of the leading objectives of the A. A. A. program. Standards might run in terms of those set forth under the first objective above; or the standard might be maximization of the volume of spending by these groups on other products. This would mean prices that secured the largest possible money income for these groups, unless there was reason to believe that they would fail to spend some part of this maximum income. It should be recognized at the outset that general recovery will not be promoted by raising the money income of particular groups, through increase in the prices of the goods they sell, unless this process somehow has the result of substantially enlarging the total volume of spending within a given time in the whole community. This will be explained in the following section.

(4) The next objective is reduction of prices in a particular industry or group of industries. The idea underlying this objective, as it is usually expressed, is the simple one that lower prices in a particular industry will result in larger production, utilization of capacity, and employment in this industry and will increase the total national income and employment of men and equipment by the amount of the increase in this industry. This view must rest on the tacit assumption that the total volume of spending on other things and the employment of men and equipment in their production is not affected by lower prices and larger production, consumption, and employment in this particular industry. Plainly there are no a priori grounds to validate this implicit assumption. In one instance it may be true, in another it may not be. It is of the highest importance to ascertain in each instance whether it is or is not true.

A price reduction on a given product, or group of products, will have a tendency to promote greater employment of resources in the whole community in the following cases:

(a) Consumers spend the same amount of dollars on this article at the reduced price, with the result that larger consumption, production, and employment in this industry does not cause a reduction in their expenditures on anything else. Hence output and employment elsewhere are unaffected. For some classes of consumers house rents might provide an example of this case.

(b) Consumers spend a smaller sum for the same or a somewhat larger quantity of the product in question, for which prices have been lowered, and increase their expenditure on other things, correspondingly. This case may be illustrated by such things as matches, and fuel for domestic heating, consumption of which does not increase much with price reductions.

(c) Consumers spend a larger sum of money on the article the price of which has been reduced. Although they spend correspondingly

less on other things, total output and employment will be enlarged, provided the increase of output and employment in this industry is greater than the decrease in other industries where expenditure is reduced.

(d) A price reduction leads consumers to use their own or to borrow other idle funds in order to increase their total expenditure on this commodity while maintaining the same volume of expenditure on everything else. Aside from business spending which is treated later, this is, perhaps, most likely to occur in the case of expensive durable goods such as houses and automobiles.

A price reduction on an article will not have a tendency to promote greater use of resources in the whole economy in the following cases:

(a) Consumers buy the same quantity of this product and fail to spend the full amount of their savings from the reduction in price. This may occur with price reductions on goods, the consumption of which increases but little with lowered prices.

(b) The reduced price leads consumers to transfer purchases in large measure from other competing goods to this article, with the twin result that they now spend less on this whole category of goods and save the difference. In this case output and employment are merely transferred in equivalent amount to this article from the competing products. An example might be found in a price reduction on one kind of meat which did not increase the total consumption of meat. Consumption of this kind of meat might increase greatly, but only at the expense of other kinds. Competing industrial materials furnish another familiar example.

(c) When a price reduction on a given product leads to greater expenditure on some other things output and employment will not be enlarged in these other industries if price increases absorb the full amount of the additional expenditure there.

(d) Although a price reduction may, for any of the reasons already explained, promote a higher level of use of men, funds, and equipment, this initial effect may be partially or wholly nullified by an increase in the amount of funds withheld from active use as an indirect result of the price reduction. The price reduction may have the effect of transferring considerable amounts of income from producing groups that were spending these sums to others who prefer not to spend them. Those who have some income may save some part of that which they continue to receive. In the end the result may even be a net reduction in use of resources.

Finally, the ultimate effect of a price reduction may be smaller employment of resources, even though the initial effect is the reverse, whenever it causes unemployment of men and equipment that can never be reemployed in any other industry. An immediate increase in total employment may come about through a process that involves reduction of employment in one or more industries which is more than offset by the increase in employment in the industry making the price reduction. If the labor and the funds added to the latter industry could later have been employed elsewhere, but by their employment here have the effect of creating permanent unemployment of some men and equipment in the competing industries whose markets have suffered, then total employment may ultimately be affected adversely.

From what has been said it is clear that standards for the desirable amount of price reduction in depression should run in terms of effects

on consumer expenditure both for the immediate product or services and factors indirectly affected and in turn the effects on employment of resources. Recognition of the difficulty of making factual estimates of these effects should not obscure their importance for the functioning of the whole economy.

In the absence of subsidy the attainable bottom limit to prices of products of private firms is whatever the businessmen consider increment costs to be. In short periods—say a few months up to a few years—some, at least, of the overhead need not be covered. However, in industries with rapidly expanding demand or industries where there are opportunities for much modernization of equipment bottom prices must give the prospect of covering the capital costs of additional equipment, for with expansion of equipment increment costs include capital costs. As a practical matter, then, standards for price reductions must be related to costs except in the cases of subsidy or public ownership and operation.

(5) The fifth objective is stimulation, through price changes, of increased spending on equipment by business enterprises. The case of increased business spending on equipment as a result of lower equipment prices is covered under (4) above. Here we have to do with the effect of a change in the price of a particular product on the equipment expenditures of the firms making that product. In cases where lower prices of a product yield a large growth in its consumption purchases of equipment by its producers may be substantially enlarged, especially if profit expectations are also improved or sums available for equipment purchases are increased. In other cases price reductions may have the effect of diminishing equipment expenditure by markedly lowering profit expectations or reducing the sums available for equipment buying.

In industries where profits are very low and opportunities for modernization are large, price increases might result in larger purchases of equipment either by direct addition to funds available for this use or by improvement of the credit of the firms in these industries.

Standards to achieve the objective of larger expenditure on equipment would need to be formulated in terms of the relations of prices to costs and revenues, to profit expectations, and to equipment spending. Here as above, increment cost would constitute the lowest attainable price except in the case of subsidy or public ownership and operation.

In many instances reduction in prices in a given industry may affect both the volume of consumer spending on its products and the volume of spending on equipment by the firms in the industry. Whenever that is so the full effect on the total employment of men and equipment in the whole community can be estimated only by attention to both kinds of effect. In other words objectives (3) and (4) on the one hand and (5) on the other hand overlap to some extent and must not be considered separately.

It is often maintained that recovery will be especially stimulated by price reductions on things that are costs to business enterprises—raw materials, equipment, public utility services, labor, and the like. The validity of this generalization can be tested only by subjecting it to the type of analysis indicated above.

(6) The last objective represents a combination of raising income and lowering prices in the same industry in order to increase spending on other things both by income recipients in this industry and by consumers of the products of this industry. This objective would be applicable, of course, only in the case of an industry where lower prices would lead to a reduction in the volume of expenditure on its products. Government subsidy or Government purchase of some part of the capacity of the industry (for example, acreage, animals, ore reserves, or plant) would obviously be necessary in order to enlarge money receipts of the industry at the same time that revenue from sales of its products fell off with price reductions.

Under certain particular circumstances each of these various objectives may contribute to mitigation of depression and promotion of recovery. In the case of each it is obviously of the highest importance to distinguish its real effects from its supposed effects, in other words to distinguish those situations in which it will promote a larger employment of resources in the whole economy from those circumstances in which it will not do this or will have the opposite effect.

The six objectives just described all relate to changes or adjustments in price or incomes. Changes in incomes can be accomplished through changes in prices, but price changes are not the only method of altering income. Moreover, fixing of minimum or maximum prices or both is not the only control device by which a public agency can affect prices. Control of output and, in some circumstances, of capacity will usually influence prices indirectly. Taxes and subsidies also represent devices to accomplish changes in prices or in incomes.

CHAPTER X

PRICE CONTROL IN RELATION TO DEPRESSION AND RECOVERY IN MILK AND ELECTRICITY

MILK

A principal purpose of milk control by the Federal Government and by the five States whose milk programs were studied in this report has been to raise or to maintain at a certain level the income of milk producers.

Insofar as milk control programs have not reflected merely the power of pressure groups they seem to have embodied two principal objectives: (1) To achieve fair incomes for producers and in some instances for distributors; and (2) to promote general economic recovery by enlarging the purchasing power of milk producers or, as it is sometimes expressed, by attaining a better balance of purchasing power of agriculture and industry.

Although promotion of recovery in the whole community has frequently been an avowed objective, no legislative or administrative standards relevant to this objective seem to have been set forth. The standards for milk price control laid down by legislatures or developed by control agencies have been described in earlier chapters. They relate essentially to objectives concerning the amount and fairness of producer incomes, the structure of prices, and the efficiency of the organization and operation of the milk industry—in other words, to matters connected with the problems discussed in earlier chapters rather than with those of depression and recovery.

In these instances of milk price control there appear no standards running in terms of the effects of milk prices on output, consumption, and employment in the whole economy. It may be contended that the parity price standard is a standard directly related to recovery. This contention can best be tested in connection with analysis of the effect upon depression and recovery of milk price increases.

In most of the instances of milk control studied here it seems clear that prices of fluid milk have been maintained somewhat higher than they would have been in the absence of control. It seems altogether unlikely that total consumption of fluid milk in a controlled market was diminished greatly by the increase in prices. Evidently consumers spent larger sums on fluid milk in these years than they would have spent if milk prices had not been raised, and the money incomes of milk producers were enlarged. The simplest possible effect of the milk price increases would be to diminish rather than to increase total employment of economic resources in the whole community. If consumers spend more dollars on milk because of the higher milk price and, having less income left for other things, spend less on some other things, there will be a tendency to less employment in the production and sale of those other goods than would exist if milk prices had not

been increased. Plainly, if the milk price increase leaves the total amount of money spent in the community per month and per year unaffected and if more of it is spent for the same quantity or a smaller quantity of milk, then less of it is spent on other things, and the consumption of other things must decline if their prices are unaffected.

To put it another way, the milk price increases transfer money income to milk producers from producers of other things, the consumption of which is reduced because more is spent on milk and less on them. Milk producers have larger incomes to spend, but producers of some other things have correspondingly smaller incomes. Offhand it might seem that the expenditure of additional income by milk producers would offset or replace the decline in spending by other income receivers in such a way that there would be no reduction in total use of resources. But this conclusion overlooks the fact that the very process of transferring money income from one group to another by a price increase on the product of the latter group diminishes the demand for the product of the group which loses income. If it did not have this result there would be no transfer of income. Hence, although, on these assumptions, expenditure by milk producers of the addition to their incomes keeps total spending in the community the same as it would be without the milk price increase, it does not keep total use of resources at the same level. If more is spent for the same quantity or a smaller quantity of milk, less is spent on some other things, and their production and consumption is less.

If the results are simply those outlined above, milk price control tends to impede rather than to promote a higher level of use of economic resources in the whole economy. This tendency would be magnified should milk producers fail to spend a larger part of the income transferred to them than the previous recipients.

There are, however, several conditions in which milk price increases would have no effect on the general level of use of economic resources, other than some possible reduction in the milk industry itself. If prices of goods on which consumer expenditure declines are reduced enough to maintain the same volume of consumption and output of these products, the general use of resources will not be diminished except by the reduction, if any, in milk production. The same result would follow if all of the additional consumer expenditure on milk came out of otherwise idle funds. It seems rather unlikely, however, that either of these two conditions would obtain to the full. Again there would be no adverse effect on the level of use of resources if price increases transferred to milk producers' income that would be withheld from spending by those who would otherwise receive it.

Further, the general level of use of resources would remain unaffected if milk producers, in addition to spending their increases in incomes, also spent out of hoards or idle bank credit further sums equal to the reduction in incomes of others occasioned by the transfer of income following the milk price increases. For in this case, since total spending in the economy was increased by the amount of the addition to milk producers' income, the total expenditure on other goods and total income received for them would not be diminished. However, if the milk producers were in financial distress before the price increases it is unlikely that they would have extensive funds upon which to draw. With better credit as a result of larger incomes they might, indeed, borrow considerable sums for extension and modernization of equip-

ment and buildings. Some part of the added spending from idle funds or borrowing might, of course, be done by producers of goods purchased by milk producers. The matter is complicated, however, by the possibility of reduction of spending on equipment out of otherwise idle funds by producers of the other goods whose incomes were reduced by the original transfer of income—or by producers of goods purchased by these.

In other words, if milk price increases are not to have a tendency to diminish total employment of men, funds, and equipment in the economy, these price increases must have the effect of increasing expenditure by milk producers or others by an amount enough greater than the addition to milk producers' incomes to offset the total reduction in spending on other goods which is a direct consequence of the milk price increases.

Finally, it is difficult to see how milk price increases can promote a higher general level of use of resources unless milk producers or others are thereby led to increase their expenditures by more than the amount just necessary to offset declines in spending elsewhere. The amount of additional expenditure necessary to promote recovery might be large if the drop in incomes of producers of some other goods, consequent upon the transfer of income to milk producers via higher milk prices, led to marked reductions in equipment spending by those other producers and hence to declines in incomes of equipment producers. Hence, although it is by no means impossible that milk price increases should contribute to general recovery, it seems much more likely that they would usually have the opposite effect, or at best exercise no appreciable effect upon the general level of use of resources.

To conclude that milk price control according to the standards used in the past several years is more apt to impede than to promote recovery is not, of course, to conclude that incomes of milk producers should not have been raised for other reasons such as considerations of equity in income distribution. If milk producers' incomes are to be raised it is most probable that outright subsidy would have much more of a tendency to promote general recovery than higher milk prices.

It is doubtless true that the amount of influence on total employment of resources in the whole country exerted by price increases on milk has been relatively small. The same can be said for all but the largest basic industries. Should the objectives and standards of milk control, as evidenced in this report, be extended to many other industries, each in itself relatively unimportant, the effect on the whole economy would obviously be substantial.

The sale of milk at low prices to relief recipients, which has been mentioned in an earlier chapter, seems to have resulted in larger consumption of fluid milk by this group. It is not clear whether price reductions of this sort tend to promote recovery, although other desirable results are obvious. If fluid milk merely replaced consumption of canned milk with no appreciable effect on total production of milk in all forms or on total expenditure on milk, the level of use of resources would be little affected. Where the scheme involved subsidy to farmers, however, producer incomes and presumably producer expenditure would be enlarged without correlative reductions elsewhere and the general level of use of resources would be improved somewhat. Secondly, if lower milk prices resulted, in a smaller total expenditure for a larger volume of fluid milk in all forms and of milk

substitutes there would be a tendency to larger general employment. Production of milk would be larger, and consumers would have more of their incomes to spend on other things, with consequent increases in production of some of these.

Finally, lower milk prices to lower income groups might promote recovery even if they resulted in larger expenditure on milk and smaller consumption of other things with less employment of resources in the industries producing the latter. For improvement in the general level of use of resources it would be necessary that the addition to employment of resources in the milk industry be greater than the reduction elsewhere. This would occur if a given number of dollars would employ more labor, capital, and other resources in milk than in the production of those things, the consumption of which declined. It would not occur if the opposite were true.

ELECTRICITY

In none of the four instances of public pricing of electricity studied in this report has promotion of recovery appeared as a major objective of legislatures or administrative agencies. During the thirties standards for prices of electricity continued to be related mainly to objectives concerning the level and structure of rates in this industry itself.

Under depression conditions the three commissions did indeed intensify their efforts to reduce rates. Extensive investigations undertaken in the early thirties in connection with rate proceedings in Wisconsin and New York showed that electric companies were enjoying good incomes in spite of the severe depression. All three commissions felt that fairness to consumers, whose incomes had in general suffered markedly, called for substantial rate reductions. The Wisconsin and New York commissions also averred that rate reductions would aid in promotion of recovery, an opinion supported by testimony of economists called by the Wisconsin commission in the famous *Statewide Telephone case*. Moreover in these two States special statutes had been passed to expedite emergency rate reductions.

Nevertheless, there was no significant modification of the "fair return on fair value" rule. The New York commission after hinting at the desirability of averaging returns over a period including years of prosperity and years of depression, stopped at reductions calculated to remove income in excess of 6 percent on stated value of stock, a lower standard than 6 percent on "fair value." The Wisconsin commission justified rate reductions in depression on grounds that the "value of service" to consumers was lower and that the "fair" rate of return to owners was lower. In nullifying a series of emergency orders and a final order in the *Statewide Telephone case* the Supreme Court of Wisconsin indicated that the Wisconsin commission had gone too far in lowering returns on the basis of consideration of economic conditions in depression. The court maintained that the commission had no power "to relieve the economic condition of consumers by taking property away from the utility and awarding it to its patrons" and that "it had no right to give dominant weight to economic theory in the face of the statutory command."

The electric rate policies of the Tennessee Valley evidence no objectives or standards with regard to general depression and recovery.

What effects upon the general level of use of economic resources in the economy might be expected from changes in electric rates? It is most probable that rate increases would have a tendency to diminish the total use of resources. This is plain if consumers spend more on electricity at higher rates and have less to spend on other things. The reduction in total use of resources would be less in proportion as consumers transferred expenditure from electricity to other things. Such transfer does not seem very likely except in the case of a few uses of electricity where substitutes are readily available, such as domestic cooking, heating, and water heating and industrial consumption, which can be replaced by a factory's generation of its own power. A rate increase might promote general economic recovery if expenditure on new equipment by an electric company was substantially increased as a result of improved earnings and credit standing following a moderate rise in rates.

Reductions in electric rates are likely to exert an influence toward a higher general level of use of resources in some cases but not in all cases. Consumption for ordinary lighting by commercial and industrial users will probably be increased little if at all by rate reductions. Nor will consumption by industrial firms already using utility power be much enlarged by rate reductions unless power expense represents a large part of the firm's total cost. In these cases reductions in electric rates will mean that consumers spend less on electricity and have more to disburse in other ways. It does not follow, however, that spending on other goods will necessarily be increased. Lower electric rates might simply transfer the saving of funds from electric companies to their commercial and industrial consumers. This result would occur if the rate reductions deprived the electric companies of a part of their income which they would withhold from active use (i. e., hoard) and if the consumers then retained this same sum from the reduction of their electric bills.

To the extent, however, that consumers spent these savings on other goods, employment of resources in other industries would be enlarged. In depression this result seems more likely for residential customers than for business customers. Although the more well-to-do may hoard cash in depression the great majority of the people would probably spend the savings from their electric bills. Hence reductions in residential rates might have a much greater tendency to raise expenditure on other goods and to increase the general use of resources than reductions in commercial and industrial rates.

The foregoing discussion has concerned those rate reductions which result in a smaller dollar expenditure on electricity. Lower rates quoted to business enterprises which have formerly generated their own power or used power from other sources of energy may result in enough increase in consumption to enlarge the expenditure on electricity. This may also be true of markedly reduced rates to new residential or farm users, or lower rates for various domestic uses, especially if cheap appliances are made available.

In such cases the effect on the total use of resources in the whole economy is the resultant of several influences. If the additional expenditure on electricity comes out of otherwise idle funds the result

would obviously be to increase activity. Expenditure for equipment or appliances out of idle funds would tend to promote general recovery. If, however, the additional expenditure on electricity and on equipment or appliances represents diversion from expenditure on other things the outcome is not so plain. The result could be adverse to recovery if sufficient expenditure was diverted from industries where the unemployment of men and equipment created by reduction of expenditure in that industry for a given outlay would exceed the additional employment of resources in electrical industries occasioned by expenditure of the same amount of money.

In summary, in several types of electric rate reductions, the probable results on the level of use of men, equipment, and funds in the whole community are not clear and would need intensive study of particular cases. It seems quite likely, however, that two kinds of reductions will tend to promote general recovery. These are reductions to business consumers or to residential or farm users which result in considerable expenditure on new equipment or appliances out of idle funds or borrowing; and reductions to residential consumers which have the result of diminishing their expenditure on electricity, leaving them more of their incomes to spend on other things.

Both public enterprise such as T. V. A. and privately owned electric companies can aid recovery by the former kind of rate reductions. With regard to the latter sort of reductions good results might be secured by a change in the rules of regulation permitting commissions to move the ordinary residential rates up and down during prosperity and depression, provided only that the companies obtained an average "fair return" over a period including good years and bad. Or, it might be provided that all earnings in each year above a certain return (including a stipulated prudent provision for unfortunate contingencies) should be impounded in a fund for use in recouping any losses incurred by reducing rates in depression on commission order. Existence of such a fund would also enable experimentation with lower rates of other sorts when the commission thought recovery would be promoted thereby, but when the effect on the company's revenues was problematical. The impounding of excess income and its use to permit rate reductions of general benefit seems quite reasonable when commissions are unable to keep rates low enough to prevent the reception of income over and above an ordinary return on investment.

CHAPTER XI

PRICE CONTROL UNDER THE BITUMINOUS COAL ACT OF 1937 IN RELATION TO DEPRESSION AND RECOVERY

Neither the statement of purpose nor the provisions of the Coal Act indicate that this law was regarded as an instrument for combating general economic depression, cyclical or secular, in the whole economy. The provisions of the Coal Act are related remotely, if at all, to the problem of increasing the use of manpower and equipment in the community. Nor does it appear that some particular kind of adjustment of the coal industry to general depression, cyclical or secular, was a major objective. There is nothing in the law to suggest that its purpose is anything other than improvement in conditions in the long-depressed coal industry itself. Its measures could have been—and probably were—written without any consideration of problems of the general performance of the whole economy and the relation of coal to this. If the question of the nature of desirable behavior of coal prices through the business cycle was considered at all, the answer was merely that the level of minimum prices should always yield a return equal to adjusted past weighted average cost. Similarly there are no specific provisions for variations in the price structure to reflect cyclical influences.

Will application of the standards for minimum prices set forth in this law tend to accentuate or modify general cyclical depression? As explained in an earlier section a rise in weighted average cost of a certain specified amount resulting from a decline in consumption and production must be followed, after a lag of several months or a year, by an increase in the level of minimum prices. Thus it is probable that minimum coal prices will rise in the course of an extended depression. Coal production, being quite sensitive to general industrial activity, will decline further as business declines. Unless higher-cost mines shut down in sufficient number—and the experience of the past 15 years gives no indication that this result would ensue with prices fixed according to the standards of the present law—average cost and hence minimum prices will continue to increase. Because current minimum prices are adjusted to cost influenced by the volume of output of a preceding year, an increase in coal prices might occur in the first year of general business revival.¹

If the increases in coal prices do not result in much reduction of coal consumption below the amounts that would be consumed with coal prices unchanged or lowered, consumers as a whole will spend larger sums per year on coal, and have less to spend on all other things, than if coal prices remained stable or were reduced. Since the same kinds of considerations apply here that were outlined in detail in the preceding discussion, there is no need for a review of

¹ Although, with monthly cost data available, there should be adequate knowledge of the current situation, making adjustments possible.

them at this point. Suffice it to say that if coal price increases result in larger sums being spent on coal than would be spent at lower prices, there will be a tendency to diminish the level of use of resources in the whole economy; unless the additional sums spent on coal come out of funds that would otherwise have been completely idle, or unless people in the coal industry are led, because of the higher coal prices, to spend out of idle funds sums equal to the additional amounts spent on coal because of the higher coal prices. There is little reason to think that the latter condition would ever be realized in practice during cyclical depression. With regard to the former condition it is quite possible that the additional sums spent by business enterprises on coal, because of the higher coal prices, might come in considerable measure from funds that would not otherwise be spent, at least during the downswing and trough of depression. But it seems unlikely that this would be true of all or nearly all firms, and it seems quite unlikely that it would be true of many domestic consumers. Hence it appears that in substantial degree higher coal prices would entail reduction in consumer spending on other things.

For a year or two coal consumption might not be much affected by price increases, owing to inertia and the capital outlays required for shifts to other sources of energy. Hence it is not unlikely that the preceding analysis would apply during the whole of a short depression and during the first 2 or 3 years of a longer depression. During the latter years of a long cyclical depression, and in a secular depression of many years, consumption may become much more responsive to current and previous price increases, with the result that total consumer expenditure on coal would become smaller at higher prices than it would be if coal prices had not been raised. Insofar as expenditure is merely shifted from coal to oil or gas by coal price increases there will be little adverse effect on the total employment of resources in the whole economy.²

Paradoxically, the coal price increases may produce an increase in total spending in the whole economy, because transfer to other energy sources requires outlays for change-over of equipment. The ensuing tendency to a higher level of use of resources in the whole community may, however, be purchased at the cost of a permanent addition to unemployment of men and machines; for the shift away from coal may represent permanent loss in demand for coal, and in large degree the coal miners as well as mining equipment can not or will not ever transfer to other employments. This complicates the matter, as is indicated in the subsequent discussion of secular influences on the general level of use of resources.

Whether or not changes in the coal price structure will be made during the different phases of a business cycle depends entirely upon the policy of the Coal Division. Since the vagueness of the provisions of the Coal Act relative to the price structure would probably enable justification of various kinds of changes, it is impossible to determine what sorts of changes may be made. If the price structure were altered in depression by raising the prices of items the consumption of which would not be much reduced by price increases, other coal prices being left unchanged, this would result in larger expenditure on coal

² A given sum of dollars may give more employment to labor when it is spent on coal than when it is spent on oil or gas, because of differing proportions of labor and capital in these industries.

than would occur in the absence of the price increases and hence tend to diminish spending and employment of resources elsewhere. Increase in prices of kinds, qualities, or sizes of coal the consumption of which would be greatly reduced thereby, because of transfer to other energy resources, would exercise much less adverse effect upon total employment of resources in the economy. Yet endeavor to make the level of prices yield an average return or price equal to weighted average cost might lead to price increases on coals whose consumption would be least reduced thereby.

Apart from effects on the total volume of spending it would seem that price reductions on any kinds, grades, or qualities of coal would tend to promote general recovery. If consumption expanded but little consumers would spend a smaller amount on coal and have more to spend on other things. If consumption of coal increased greatly because consumers shifted from other fuels to coal, total expenditure on fuel would in all probability decrease and consumers would have more to spend on other things. The principal question would seem to be whether consumers would or would not spend most of the difference. On this matter there may be a considerable difference between business consumers and domestic users, the former being much more likely not to spend the saving on fuel expenditure, especially in the middle of depression. Since the largest part of bituminous coal consumption enters industrial use, even in depression, it might be that lower coal prices would not exert much influence toward general recovery. To the extent, however, that lower coal prices induced shifting from use of other fuels to use of coal the expenditures for changeover of equipment would automatically result in a net addition to total spending.

With regard to cyclical depression, the probable effects of changes in coal prices on the level of use of resources in the whole economy may be summarized as follows. When increases in coal prices result in larger expenditure on coal in depression than would attend stable or lowered prices, the probable effect is a tendency to increase total unemployment of resources in the whole economy. However, if coal price increases result mainly in shifting an increment of expenditure from coal to other fuel and energy sources, there may be little effect on total employment of resources,³ except for the results of expenditure on equipment required for changeover. Reductions in coal prices during depression may result in little increase or a great increase in coal consumption. In the latter case coal will merely replace other energy resources, and total fuel consumption will be increased little if at all. Hence in both cases consumers will have savings on fuel. If a large part of these savings is not spent there will be little stimulus to general economic recovery. Where coal replaces other fuels in large measure the expenditures on changeover might be larger than the amount saved on fuel, with the result of a net stimulus to recovery. It seems likely that the Coal Act will require price changes in cyclical depression that will operate in the direction of enhancing unemployment of men and machines in the whole economy; and it is doubtful that price changes that would operate in the opposite direction will be made under this law in its present form.

³ The fact that consumers who do not shift to substitutes will spend more on coal than they would spend at lower prices will probably mean that total expenditure on energy sources will be increased somewhat by the increases in coal prices.

Let us turn now to coal prices and secular trends in the level of use of resources. Altered relations between the prices of coal and the prices of oil and gas that remain in effect for several years will produce much larger changes in the relative consumption of these fuels than short-time alterations in prices. If minimum price fixing in coal results for several years in coal prices higher relative to prices of oil and gas than those formerly prevailing, it is scarcely to be doubted that coal consumption and employment of coal miners and equipment will suffer substantially from transfer of demand to the other fuels. Although this may not, for the time being, greatly diminish total employment of resources in the whole economy, it may do just that in the long run. Insofar as coal mining equipment is abandoned before it wears out, and replaced by new equipment for oil and gas purchased with funds that would have been invested elsewhere, there will be a long-run loss. More important, the "fixity" of coal miners seems to be nearly as great as that of mining equipment. To the extent that unemployment of coal miners is increased by a process in which their place is taken by adding labor in oil and gas production that would otherwise be employed somewhere else, there is a loss to the community manifested in the group of miners who produce little or nothing for the rest of their lives. Both men and equipment will be allowed to "rust out".

Moreover, the matter is complicated by considerations of conservation of scarce natural resources. Although additions to reserves of oil and gas by new discoveries have in recent years somewhat exceeded production, it would require discoveries of incredible magnitude to hoist the reserves of these two energy sources to a position comparable to that of bituminous coal. Expressed in tons of equivalent high-grade bituminous coal, the present known reserves in the United States of these three energy sources are as follows: Bituminous coal, 2,500 billion net tons; petroleum, 4 billion net tons; and natural gas, 3 or 4 billion net tons.⁴

There is, then, the danger that unemployment of resources in the coal industry may be increased by price fixing under the Coal Act in its present form, and that a large part of these men and the particular equipment involved will be lost to the country forever, as far as productive operations are concerned. Furthermore, the Coal Act contains no provisions for attempts at rehabilitation and retraining of unemployed miners for transfer to other employments; nor does it include measures to encourage young men in the coal regions to move elsewhere rather than to become miners while there is still a large reserve of unemployed miners.

It is patent that the endeavor to secure full use of the country's manpower will be impaired if men not yet employed in oil and gas production and capable of other employment are put to work in those industries with the result of increasing the number of unemployed miners, who can be transferred to other socially valuable work only with difficulty, if at all. If labor already employed in oil and gas production is more easily transferable to other productive pursuits than coal mine labor, considerations of full employment of manpower would call for shifts in consumption from oil and gas to coal rather than shifts in the opposite direction. Regard for conservation and national defense would seem to make it wise to curtail consumption of oil in uses for which coal is almost as satisfactory. The logic of these con-

⁴ National Resources Committee, *Energy Resources and National Policy*, p. 10.

siderations is that prices of coal should be lower relative to oil and gas, rather than higher.

The general policy (with regard to fuels) best calculated to produce an increase in the total use of economic resources in the economy would seem to be reductions in the prices of all three fuels, so that consumers spent less on fuels as a whole and more on other things; and inauguration of differentials between the prices of coal and the prices of oil and gas which would produce a gradual increase in the proportion of total consumption going to coal sufficient to give substantial diminution in unemployment in coal. However, decision on the question whether prices of oil and gas should be reduced at all, or should be raised, must depend in large measure on what is deemed wise conservation policy—a matter that lies beyond the scope of this report.

To the extent that lower coal prices merely shifted consumption from other fuels to coal there would be no impetus to increased employment of resources in the whole economy, apart from the initial equipment expenditures required for changeover. But the lower coal prices would create one condition necessary for full employment: Unemployment would be shifted from miners, whom it is exceedingly difficult to transfer into other occupations, to workers (or those soon to go to work) in other fuel industries, who can be more easily reemployed elsewhere.⁵

Even if oil and gas prices are raised somewhat in the interests of conservation, it is scarcely to be doubted that reduction of bituminous coal prices to a low enough level would result in a reduction in total consumer expenditure on fuels as a whole and hence act in the direction of an impetus to larger employment of men, equipment, and funds in the whole community. Moreover, drastic reductions in some coal prices might lead directly to added business expenditures on equipment, out of idle funds, which would tend to improve the general level of use of resources by increasing total spending in the community.

It is quite possible, however, that coal prices low enough to produce these desirable results would fail to cover the out-of-pocket expenses of many, perhaps most, mines. If that were so, actual prices would not go so low, or competitive wage-cutting would be resumed, or many mines would shut down. It may well be that coal prices low enough not only to reduce unemployment of mine labor and equipment to a small minimum, but also to give an appreciable impetus to larger spending and employment of resources in the rest of the economy outside the fuel industries, could be satisfactorily maintained only through Government subsidy to coal operators or by nationalization of the bituminous coal industry.

To conclude that subsidy would probably be necessary to maintain coal prices low enough to reduce total consumer expenditure on fuels does not imply that unemployment in coal might not be greatly diminished without subsidy. Unemployment of coal miners could, perhaps, be reduced to a tolerable minimum merely by maintenance of differentials between the prices of coal and other fuels sufficient to increase consumption of coal markedly and by vigorous efforts to retrain a part of the unemployed miners and get them into other

⁵ With regard to labor already employed in other fuel industries that point rests, of course, on the presumption that such labor is much more capable of reemployment elsewhere, should opportunities arise, than are coal miners.

occupations. On the other hand some additional special subsidy might be required for this objective. It would depend on the levels of oil and gas prices, the extent of substitution of coal for other fuels that would occur with price differentials of different sizes, and the number of unemployed miners who could be reemployed only in the coal industry.

It should be understood that subsidy, if necessary to eliminate unemployment of miners who can never be employed elsewhere, represents no loss or burden of any kind to the community as a whole. On the contrary, if miners who would otherwise produce nothing are reemployed in mining the community is richer by the amount of their product of coal. If the subsidy is paid originally from deficit financing, in such a way that total spending in the country is increased thereby, it is obvious that there is no immediate charge on the community. The total money income of the country would be immediately increased by the amount of the subsidy, and the total real income would be enlarged by the additional output of coal. If any subsidy at all is required to give full employment of miners, the additional expense to Government would not, in any case, be as large as might at first sight appear. Relief payments constitute an overhead cost from the standpoint of the community as a whole. The net additional expense for subsidy to reemploy these miners would be merely the difference between the relief payments and the gross subsidy necessary to get the miners employed at standard wages.

The wisdom of additional subsidy for the purpose of reducing coal prices, below the level necessary to eliminate unemployment in coal to a level such that consumers would spend less on coal, and more on other things, would depend on the relative effectiveness, in promoting a higher general level of employment of resources, of this use and alternative uses of public funds.

With regard to conservation of coal and its relation to price fixing, in general, it is true that the lower the prices the more coal is left in the mines, because prices fail to cover the out-of-pocket costs of getting it out. And ordinarily, when a mine is once abandoned, all the coal that will pay for itself at current prices having been extracted, the remaining coal is lost forever, or at least for decades. The present coal law contains no price standards related to conservation, although the regulatory agency is directed to study the problem. Indeed, it is highly doubtful that price fixing alone can aid much in conservation of coal. Prices set high enough to insure a very high extraction of coal in each mine might increase the inroads of competing fuels, or give high profits to low-cost mines, which should not be permitted to operate if the object is to use up high-cost coal without subsidy to get it mined. It is plain that prices high enough to increase the amount of extraction from most mines would be above the level of prices appropriate to maximum economic consumption, as that was conceived in an earlier section, and much above prices that would eliminate unemployment among coal miners. It follows that conservation of coal can be made compatible with pursuit of these other objectives only by application of a particular kind of subsidy designed to encourage it without hampering attainment of the other objectives, or by allocation of output among mines.

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